



JRC SCIENTIFIC AND POLICY REPORTS

# Scientific, Technical and Economic Committee for Fisheries (STECF)

## REVIEW OF PROPOSED DCF 2014-2020 PART 2 (STECF-13-01)

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This report was reviewed by the STECF by written procedure in January 2013

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# **SCIENTIFIC, TECHNICAL AND ECONOMIC COMMITTEE FOR FISHERIES (STECF)**

## **REVIEW OF PROPOSED DCF 2014-2020 - PART 2 (STECF-13-01)**

### **THIS REPORT WAS REVIEWED BY WRITTEN PROCEDURE IN JANUARY 2013**

#### **Background**

In parallel with the development of the new EU Common Fisheries Policy and the European Maritime and Fisheries Fund (EMFF), the Commission is currently preparing a proposal for a new EU Multi-Annual Programme for data collection for the period 2014-2020 (EU DC MAP).

Articles 37 and 38 of the CFP reform proposal set out the broad obligations for Member States to collect biological, technical, environmental and socio-economic data and to cooperate regionally. The EMFF will serve as the financial pillar of the future EU data collection programme, providing the basis for national programmes implementing the EU DC MAP 2014-2020.

This new EU multiannual programme for data collection will be adopted as soon as the new Basic Regulation is adopted by Council and the European Parliament.

This item has been on the agenda of several STECF EWG meetings:

- STECF EWG 11-02, on the functioning of the current DCF system and on possible improvements for the future,
- STECF EWG 11-19, which carried out a SWOT Analysis of DCF,
- STECF EWG 12-01, concentrated on content issues of the DC MAP issues for the new DCF, and highlighted necessary decisions on the governance structure, but did not deal with it in detail.

#### **Request to the STECF**

STECF is requested to review the report of the STECF Expert Working Group 12-15, evaluate the findings and make any appropriate comments and recommendations.

#### **STECF observations**

STECF notes that the ability of the EWG 12-15 to fully address all Terms of reference was compromised by the absence of a draft DC-MAP regulation and that the study on social indicators was only available in French. Furthermore, the terms of reference given to EWG 12-15 included issues where no expertise was available, for instance legal elements.

Nevertheless, STECF considers that the report provides useful input to the discussion on the future content of the DC-MAP, but stresses that it represents a work in progress and that further consideration on the content and structure is required. STECF considers that a proposed draft of the DC-MAP regulation will be essential to structure future discussions.

STECF also notes that while data collection issues are very complex, it is of paramount importance that the data that are collected are correctly specified at the outset in order to build a consistent and long time-series of appropriate data for analysis. If the specifications for data collection and management are incorrectly specified and need to be changed periodically, some time series will inevitably be broken and this would have a detrimental effect on the ability of fisheries scientists to provide pertinent scientific advice for the management of fisheries. Hence, in order to secure a stable and consistent approach to data collection, STECF considers that it is necessary to have a core data program for the collection of priority data. Such data have yet to be defined.

Furthermore, that it is essential that all requirements in the DC-MAP regulation are clearly defined and described in order to minimize misunderstandings and collection of incomparable data.

It is also important to clarify and agree who the end users of the data will be, who should be given access and at what level of aggregation. There should also be greater consultation with the end users in defining what the actual data needs are and this should be done in cooperation with the clients of scientific advice in order to anticipate the type of questions that are likely to arise in relation to the management of EU fisheries (since this, in part, will determine the data that will be required to address such questions). The feasibility and cost of data collection including the overhead cost of managing the data collection programme must also be assessed to ensure cost effectiveness and value for money.

An important point to address in the DC-MAP regulation is the institutional setting. Having Regional Coordination Groups requires clear rules on decision levels, in order to secure the core data collection requirements. In addition, to ensure compatibility across regional coordination groups a forum for overarching coordination should also be established. It is also relevant to address the involvement of STECF and the role of for instance PGECON.

STECF considers it desirable and relevant to setup regional databases, but several points need to be addressed in this regard. Issues such as ownership, management, maintenance, development, link with data calls (who shall MS deliver data to?) and usability in relation to for instance future management needs for ecosystem analysis must be addressed and clearly defined. It is also necessary to consider how databases hosted by RFMOs (e.g. CECAF, ICCAT etc.) can be used in a regional context.

STECF notes that a variety of data are collected under the control regulation (COUNCIL REGULATION (EC) No 1224/2009 of 20 November 2009). STECF considers that double collection of data is undesirable and should be avoided. Hence care needs to be taken to ensure that the data collected under the DC-MAP and those collected under the control regulation are not duplicated.

In order to address requests for bioeconomic advice, STECF considers that it is important to ensure that biological and economic data are collected in such a way that they can be assembled at a common fleet segmentation level of aggregation to enable bioeconomic data analysis for fishery management purposes. This is likely to involve fundamental re-thinking on the appropriate level of aggregation for the collection of both sources of data.

STECF considers that the inclusion of economic data collection on freshwater aquaculture in the DC-MAP needs a clear rationale if it is to be adopted. If the objective is to compare the profitability of aquaculture production with that for marine fisheries then data on freshwater aquaculture will be obviously be required. Similarly, if the objective is to assess the profitability of seafood production against other forms of fish production such as inland freshwater fisheries then data on inland fisheries would also need to be collected. If the objective is to evaluate the effectiveness of subsidies or other policy measures on different forms of fish production, then it should be mandatory for the subsidy recipients to provide specified economic data. It is also clear that the aquaculture sector in many MSs consists mainly of small entities and therefore economic data collection could put a substantial burden

on such enterprises as well as on MS. Furthermore, it is highly desirable that aquaculture data collected under the DC-MAP and by National Statistical Offices under Reg. 762/2008 do not duplicate but are defined in consistent ways such that data from both sources can be used together.

STECF agrees with the EWG statement that the *métier* concept has been successfully applied in the present DCF for classifying fishing operations in a standardized way between MS. However, the *métier* concept does not allow for combination of biological and economic data.

There are a number of recommendations listed in the Report of the EWG 12-15. STECF stresses that the EWG recommendations must not be taken as STECF recommendations and should be only be regarded as points for further consideration and discussion. Recommendations from STECF based on the Report of the EWG 12-15 are listed below under STECF Recommendations.

### **STECF recommendations**

In relation to the collection of social data, STECF recommends that a pilot study on the feasibility and constraints of collecting such data be undertaken, having in mind that analyses incorporating biological, economic and social data are likely to be required at the regional level.. This pilot study should also investigate which types of social data under consideration are already available through other legislation and whether the data from fisheries are sufficient to perform the desired analyses. However, firstly it is necessary to identify possible end-users and types of applications.

STECF recommends that the Commission conduct a thorough evaluation of whether the mandatory collection of freshwater aquaculture data should be included in the DC-MAP. Such an evaluation should take into account the administrative costs of collection and management of such data and its utility value. STECF suggests that the anticipated data collection costs should be compared to the significance of the aquaculture sector in a given MS. The production thresholds applied through Farming Accountancy Data Networks (FADN) might be a useful guidance for doing so.

STECF recommends that the proposed nomenclature and further specifications for “other variables” given in Annex II of the Report of the EWG 11-18 should be adopted for the DC-MAP.

Given that the *métier* concept has largely been successfully applied in the present DCF for classifying fishing operations in a standardized way between MS, STECF recommends that the system of classifying fishing operation into *métiers* is kept in the future DCMAP and that all transversal data as well as sample data is/could be assigned to a *métier*.”

**EXPERT WORKING GROUP EWG-12-15 REPORT**

## **REPORT TO THE STECF**

**EXPERT WORKING GROUP ON  
REVIEW OF PROPOSED DCF 2014-2020 - PART 2**

**(EWG-12-15)**

**Brussels, Belgium, 01-05 October 2012**

This report does not necessarily reflect the view of the STECF and the European Commission and in no way anticipates the Commission's future policy in this area

## **1 CHAIRMAN COMMENTS**

The EWG 12-15 was planned to discuss a first draft of the new data collection regulation. Unfortunately, this first draft was not prepared in time for the meeting, which meant that the scope of the meeting had to change and had to be adapted to this fact. EWG 12-15 therefore concentrated on providing support to the Commission in order to draft the EU DCMAP.

Concerning the advice on including freshwater aquaculture, the EWG 12-15 felt to have lack of information (clear justification from the Commission on needs and uses) and lack of representation by freshwater aquaculture experts. This is not at least due to the fact that the expert group on aquaculture met the week before and that a workshop would have been held in the week during STECF 03 plenary. So a lot of potential experts were not able to attend EWG 12-15. But nevertheless, EWG 12-15 tried to address this issue.

This feeling of lack of information and lack of representation was also present when discussing the inclusion of more social variables into the data collection. If a study, like the one on “L’identification des indicateurs sociaux pour le secteur de la pêche dans l’Union Européenne” shall be evaluated by an EWG, an English translation should be available. If the Commission launches a study which shall be used in the CFP framework it should be assured that all experts are able to read this study. There could be a long discussion which language would be most appropriate, but commonly English is the working language in the STECF and its EWG.

Even if the working process of the work during the week was not an easy task, I would like to thank all the participants for their effort and contributions.

## **2 EXECUTIVE SUMMARY**

The STECF Expert Working Group (EWG 12-15) on the Review of proposed DCF 2014-2020 met from the 1st to the 5th of October 2012 at Brussels. The work on the TORs, which are given in chapter 4, was mainly allocated to sub-groups and its reports were discussed in plenary. Conclusions and recommendations in chapter 3 and 4 are agreed upon in plenary by the whole group, while conclusions and recommendations in chapter 6 are proposals from the sub-groups and are not agreed on in plenary unless otherwise stated.

This report on the NEW DCMAP has to be seen in addition to the reports of other working groups that already have dealt with the issue. In particular, EWG 12-01 and the STCEF plenary assessment of that report (STECF 12-07) were the basis of the EWG 12-15 discussions.

The EWG 12-15 participants were divided into two sub-groups. One group got the tasks to discuss and propose text for the new DC-MAP concerning i) biological data, ii) transversal data, iii) surveys at sea, iv) recreational fishery, v) data collection on salmon and eel vi) regional databases. This group in particular drafted proposals for text for the upcoming regulation. These drafts may be found in the conclusion in chapter 3.

The other sub-group dealt with the review of current DCF socio-economic variables by discussing their rationale and justification of data collection for those variables, incl. the proposal of new variables. A traffic light system was applied in order to highlight if data collection for certain variables is necessary (A), beneficial (B) or only nice to have (C), with data collection resulting in more costs than benefits. This group further tried to evaluate the proposed integration of data collection on freshwater aquaculture. Finally this group argued about the proposed integration of more social variables into the data collection framework.

In addition to the sub-groups tasks the EWG 12-15 was asked to discuss and propose organisational set-up of the regional coordination groups and the decision making process. For the organisational set-up a proposal is given in chapter 3. If more decisions shall be made on a regional level and more



flexibility shall be introduced into the DCF while maintaining a core data collection programme, the question of how, by whom and on what issue decisions could be made by different bodies under the new DCMAP arises. Will the Commission have the last word on some issue to be decided, e.g. by a veto right. At the regional level, who has the right to decide on what? Do all end-users have the same rights in the DCMAP context? A presentation on a possible structure was given (see chapter 6.2). The EWG 12-15 had a short discussion on the issues but found that the group was not in position to come up with any conclusion or recommendation besides raising core questions that will have to be solved by MS and the Commission.

Additionally and mainly prepared as an input to the EWG 12-15 discussion some presentations were given on:

- the current state of the proposed DCMAP;
- the study “L’identification des indicateurs sociaux pour le secteur de la pêche dans l’Union Européenne”;
- the “Link of DCMAP to other legal texts”.

Unfortunately, the study “L’identification des indicateurs sociaux pour le secteur de la pêche dans l’Union Européenne” was only available in French. Hence, a majority of experts were not able to fully understand the text, even if a short presentation on its main findings was given in English (unfortunately with slides also in French). This should be avoided in the future.

In agreement with the Commission, TOR C.2 was only dealt with very broadly and no Annual Work Plan (AWP) had to be produced. As a first rough guide the part on Annual work plans and the paragraph on Annual reports from the Oostende Declaration (dealing with commercial fisheries sampling) was agreed on and it can be found in the Annex IV.

The general principles agreed upon by STECF EWG 12 15 were:

- Improve regionalisation in data collection
- Data that are collected has to meet end-users needs
- Introduce more flexibility in order to respond to changes in end-users need
- Avoid double collection of data
- Core data collection shall be ensured in order e.g. to remain necessary time series
- Decision making shall be efficient
- Changes and adoption shall base on scientific rationale
- Ensure high scientific quality of the data collected

STECF-EWG-12-15 reflected on the implications of strengthening the role of the RCM and how this could be spelled out in the EU DCMAP. The proposed solution is to change the RCM into a continuous regional coordination process by creating a Regional Coordination Group (RCG).

The decision making process after the establishment of the new DCMAP in order to fulfil new needs of end users or to abolish collection of specific data was discussed as well as the necessary decisions at the beginning of the new regulation. There is a clear tendency to put the competence of changing data collection needs to the RCGs, by making sure the stability of the core data collection programme by having these adoptions evaluated by the EU Commission and its scientific advisory body. Therefore the Commission could have a veto right.

The EWG 12-15 discussed, considering the outcomes of EWG 12-01, how sampling of variables related to stock and fishing activities could be outlined in the new DCMAP. There was a general agreement that details prescribing the sampling as much as possible should be managed outside the

actual regulation. Details on stocks and fleets to be sampled as well as variables and periodicity in the sampling should be outlined by the RCGs and stored in a common repository.

Minimum sampling requirements need to be established in order make sure that MS maintain sampling resources at least at the present level. To maintain stability in the system it is advisable that principles for the variables to be sampled are described in the DCMAP.

The EWG 12-15 debated the *métier* concept. *Métiers* are, as pointed out in EWG 12-01, undesirable as sampling strata for landings and catches. The *métier* concept has however been successful in the present DCF for classifying fishing operations in a standardized way between MS. It is thereby necessary and recommended that the system of classifying fishing operation into *métiers* is kept in the future DCMAP and that all transversal data as well as sample data is/could be assigned to a *métier*. Sampled data should also be assigned to *métier* using the established codes already provided by the RCMs.

EWG 12-15 discussed on stocks and variables covered by the DCMAP. It was agreed that there is no need for a list specifying the stocks to be sampled to be included in the actual regulation. Instead it is suggested that the DCMAP specifies that MS should be obliged to sample the stocks on a priority list (P1) for variables specified by the RCG. It was agreed that P1 list should contain all stocks that are assessed by an international body and/or are internationally managed. The list could also include stocks for which there is a clear plan to initiate an international assessment work. The DCMAP should define the justification of P1 stocks. It was agreed that the RCGs should be given the role to compile the actual list of stocks in cooperation with the end-users.

The DCMAP needs to specify the core variables to be sampled for stocks. The core variables are the variables present in DCF annex VII. However all variables do not need to be collected for each stock. The RCGs should therefore, in cooperation with the end-user, specify which variables that needs to be collected for each stock as well as the periodicity for this collection. The RCG should be given this role in DCMAP. When implementing DCMAP in the first year, it is not expected that the RCGs have been able to prepare such a list. In that case annex 7 in the DCF could be used for the first year in the DCMAP period.

EWG 12-15 discussed the need to include quantitative targets for sampling effort. It is of the opinion that DCMAP should not include details on sampling effort (number of fish to be sampled etc) but there need to be a quantitative target in the regulation to ensure to maintain sufficient sampling by the MS. Such quantitative target could be motivated by quality requirements.

EWG 12-15 discussed how quality could be evaluated and assured. In the present DCF precision (CVs) is the “standalone” indicator of data quality. Even if data is precise it could be corrupted by bias. Quality indicators could relate to the design, performance and documentation of the sampling programme as well as to the output data. Quality indicators need to be developed by relevant expert groups. The DCMAP needs to assure that MS are obliged to report on the quality of the data in accordance with the indicators. The indicators themselves do not need to be included in DCMAP but have to be listed somewhere. Annual work plans should be evaluated against a best practice. Guidelines on the application of best practice in statistically sound sampling programmes in a national as well as in regional sampling designs need to be developed.

EWG 12-15 debated the need for sampling of fisheries at sea. In the DCMAP, MS should be obliged to carry out sampling of catches in fisheries to achieve estimates on discards as well.

The EWG 12-15 discussed the sampling of foreign landings. The general rule is that stocks need to be sampled by the ones that have access to the fish. This implies that the obligation to sample landings of foreign vessels must be in the MS of first sale. In an ideal case, all Member States would carry out statistically sound sampling in which all landings into their country, including landings from foreign vessels, are captured within their sampling frames. Under a truly probabilistic sampling scheme those vessels would be sampled by the host nation and used by the host nation in its raising process (this also requires data on all such landings into the host country to be available – i.e. including the non-sampled

landings from foreign vessels). But if, as a Member State, you excluded foreign vessel from your sampling frame which would probably be the case if you were not carrying out a fully-inclusive sampling scheme, you would need bilateral agreements. In this case, it should be the MS of the flag country that are responsible for establishing bilateral agreements in order to ensure that the sampling will be carried out or to agree on a different way to sample these landings.

EWG 12 15 discussed the progress on review of eligible surveys and recognised the postponed time frame for it due to the development of DCMAP. A suggestion for the regulation text on surveys may be found in chapter 3. The group agreed on the need of an evaluation of the list. The proposal is to do it by external experts.

Concerning the collection of transversal data, a distinction needs to be made between vessels which are subject to logbooks and vessels which are not. The latter ones are vessels <10 m which comprise a large part of the fleet in terms of the number of vessels.

For vessels which are subject to logbooks, transversal variables are collected through the control regulation. No additional variables need to be collected through the DCMAP, ideally. But of course, logbook can be used only if it can be proved that data collected through logbooks are complete (e.g. they cover all trips of a métier) and reliable (in terms of reported data). If the data are not complete the Control Regulation should be strengthened instead of being compensated by the DC-MAP.

For vessels which are not subject to logbooks (these are typical small vessels <10 m which comprise a large part of the European fleet in particular in the Mediterranean plus all fishing trips that are under derogation for the compilation of logbook) there are two alternative to collect transversal variables:

- bring these vessels under the logbook obligation or implement an alternative obligation in the control regulation which provides the required information. In that case no further action is needed and the comments given to vessels subject to logbooks apply although this has the risk that data would not be reliable;
- alternatively MS to implement a monitoring programme estimating the transversal parameters listed in document y (with indication of achieved quality). An expert group to come up with description of good practice procedure to collect transversal data.

In general it should be checked that the transversal variables provided by the Control Regulation are in the required units, in particular the effort variables. For set nets, the soaking time should be included in the Control Regulation. If new transversal variables are introduced, these need to be covered by the Control Regulation.

The group discussed the results of the workshop on eel and salmon (WKESDCF). The group agreed that for salmon and eel, data for assessment purposes shall be collected from inland waters. The rivers where such data is collected as well as variables which are to be collected in each of the rivers could be decided in Regional Coordination Groups, if appropriate. For European Eel the coordination effort may justify coordination on a Pan-European level.

Data collection on recreational fishery shall be mandatory if a certain share of total catches is taken by recreational fisheries. To assess this, MS shall collect data on volume and species composition in a certain timely distance, e.g. every 3 years. The frequency is still an open question and this and the methods and coordination may be done by the RCGs.

The group discussed the inclusion of freshwater aquaculture by trying to assess the costs of such data collection. Furthermore a first attempt was made to discuss the inclusion of social variables.

It was recognised that data collection of freshwater aquaculture needs a clear rationale. If it is done in order to assure seafood availability, then data on inland fisheries must also be collected. If it is done to evaluate subsidies or other political measures, then it should be mandatory for subsidy gainer to provide specified economic data. It should be clear, that the sector in many MS is organised in small entities and therefore economic data collection could put a lot of burden on these enterprises and the

MS. Finally the competence of the EU to establish such data collection in the inland waters was doubted.

EWG broadly discussed the collection of new, in particular social variables. The group agreed that as a first step, end-users and applications have to be clearly defined. Then a (pilot) study on the feasibility and constraints of collecting such data may be launched, having in mind that very likely applications are on a regional level. Data collection for fleet, aquaculture and processing data have to be adapted a bit according to the annex II of chapter 6.9 of this report (addressing TOR B.5), e.g. the collection of data on raw material volume and its origin (Domestic/EU/Non-EU, aquaculture/fisheries) by species should be integrated into the fish processing data collection again. As a first step all MS may assess the feasibility of collecting such data.

Regional Databases are to be created in order to allow cost efficient exchange of data and information. They shall be filled with the respective data without having extra data calls. The relevant database for economic data has still to be discussed.

### **3 CONCLUSIONS OF THE EXPERT WORKING GROUP**

Chapter 3.1 gives a brief overview about the proposed structural set-up of the New DCMAP. Chapters 3.2 to 3.6. contain the agreed draft text proposals for the new DCMAP and conclusions from the sub-group and from the plenary discussions. More details of the work conducted in sub-groups can also be found in chapter 6.

#### **3.1. Organisational Set-up of NEW DCMAP (Tor A, C.1)**

EWG 12-15 broadly discussed a solution for the organisational set-up of the new DCMAP. It was concluded, that the new regulatory framework should contain of a basic regulation, which as often as possible refers to documents in a master documents repository. The basis regulation contains the principles, while the master documents will include all the necessary details, as the stocks to be assessed, the variable to be collected, best practices to be followed etc. This is proposed in order to bring in more flexibility into the system, i.e. to be able to anticipate faster on changes in data requirements by the end-user. Starting with a data collection programme, which could be understood as the core programme, Regional Coordination Bodies, here named Regional Coordination Groups, will work as the primary bodies to bring in end-users needs. Therefore the role and the competence of the end-users, maybe different from user group to user group, must be clearly defined. Also the nomination and the role of delegates from the participating Member States and their competence, in particular concerning financially binding decisions, needs clarification. After the first set-up of the core data collection programme, a clear decision process is needed in order to deal with adaptation and changes. The group agreed that the core programme needs special protection against arbitrary changes. One solution could be that all Member States have to vote in favour of a proposed change, one could be a veto right for the EU-commission. This includes, that the acceptance process of amending the data collection programme without affecting the core programme must not be as costly and sophisticated as an amendment of the core programme, in order to get a more flexible and end-user driven data collection framework. The principle body to deal with proposed changes and amendments shall be the respective Regional Coordination Group(s) (RCG). Here is must be assured, that an arbitrary increase in data collection obligations placed on Member States can be avoided. An example for such an organisational set-up of a decision making regulation is presented in chapter 6.2. (This example of a possible decision making process is by no means an agreed proposal as the group considered to not have the necessary expertise on this topic. It is presented to highlight the necessary issues that have to be addressed by the new regulation).

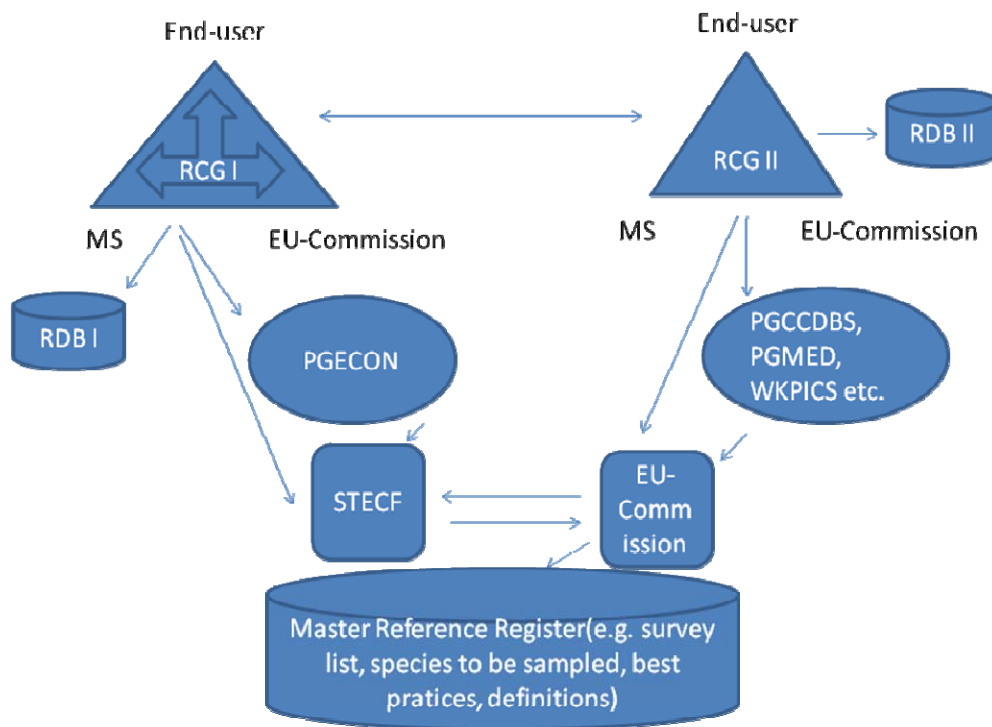
Further, principal data storage is proposed to be done in regional data bases (RDB) and they shall be financially ensured in the new DCMAP. Data shall be uploaded to the RDB on a regular basis, in order

to avoid work with the regular data calls. Of course, data calls on specific issues are still possible. Concerning economic data there is no solution proposed so far.

The role of PGECON could be similar to the methodological Working Groups at ICES: Providing methodological advice and ensure harmonised data collection.

EWG 12-15 also concluded that the storage and handling of the Master reference documents, proposed name is Master Reference Register, must be dealt with very clearly and thoroughly, as it will be the core reference for all MS and the EU Commission.

A figure maybe illustrates the conclusion on the organisational set-up (Tor A.1&2, B.1, C.1):



End-users, Member States and the EU-Commission coordinate on a regional level as many tasks as suitable, maybe coordinating with other Regional Coordination Groups (RCG). The management of Regional Data Bases (RDB) is also done by RCG. Member States (MS) execute their coordinated Annual Work Plans by respecting and following the provisions in the Master Reference Register (MRR). ICES Working groups and STECF (maybe with PGECON and EWG) advise the EU-Commission. They may deliver proposals for the Master Reference Register (survey list, definitions etc.). The EU-Commission finally decides which reference documents are to be stored in the Master Reference Register and are binding for all MS.

STECF EWG 12-15 reviewed reports and recommendations of former EWG and discussed text proposals for the new DCMAP. The plenary conclusions and proposals for parts of the regulation text of the New DCMAP are presented in the following sub-chapters.

### 3.2 Research surveys at sea (TOR B.5, C.1)

#### Proposed draft text for DCMAP

Member States shall carry out research surveys at sea to evaluate the abundance and distribution of stocks, independently of the data provided by commercial fisheries, and to assess the impact of the fishing activity on the environment.

For new surveys or surveys without participation of all Member States involved in the relevant fisheries, Member States having a share of minimum XX% in landings of a stock covered under a survey shall participate in surveys as listed in Annex XX through (partial) funding and/or providing experts and/or vessel time.

The list of research surveys at sea eligible for the Community financial assistance, as referred to in Article XX, is provided in the multi-annual Community programme and shall be adopted with the procedure referred to in Article XX.

On the basis of advice from the STECF, the Commission may evaluate and update the list referred to in paragraph XX and authorize Member States to make modifications in the design of the research surveys at sea.

#### Research survey data delivery

Member States shall ensure that the primary data collected under the research surveys at sea are transmitted to international scientific organisations and appropriate scientific bodies within regional fisheries management organisations in accordance with the international obligations of the Community and the Member States.

### **3.3 Variables related to stocks and fishing activities (TOR B.1, C.2)**

#### Proposed draft text for DCMAP

##### *Sampling strategy*

MS should perform sampling programs to collect the data necessary for evaluation of stocks and fisheries. Sampling should be carried out in accordance with best available practice for statistically sound sampling.

(Here a reference to best practice document should be included. This document should be adopted by STECF.)

MS should in their AWP include a detailed description of the design of the national sampling programme and a description of how probabilistic selection takes place in the various components and stages of the scheme.

##### *Variables*

#### Variables to be collected for stocks

MS should be obliged to sample stocks that appear on a reference priority list. This list should be agreed with end-users at RCG and should be available at a specific repository.

Both landings and discards should be sampled for the core variables if the stock appears on the list. RCGs may, after consultation with end-users, agree on derogation to sample discards for biological variables for certain stocks if the discard rate is low or if data is not used by the end-users.

The DCMAP should state the type of stocks that should appear on the list. Stocks that are assessed by an international body/RFMO and/or are internationally managed should appear in the list. Additional stocks can be added after agreement with end-users in RCG and adoption by STECF, but this may necessarily involve agreement on reducing sampling obligations (stocks or intensity) elsewhere. to avoid unsustainable ‘mission creep’.

Core variables are the variables in the present DCF annex VII, all variables are not core variables for all stocks. RCGs have to work out details. List of variables to be sampled by stock should be in a repository.

Keep updated annex VII as fall back option if RCG lists do not exist timely.

Reference to detailed list on additional variables agreed with end-user at RCG.

B.1.1.2 in present DCF need to be kept

Where relevant, additional biological sampling programmes of the unsorted landings have to be carried out in order to estimate:

(a) The share of the various stocks in these landings for Herring in the Skagerrak IIIA-N, Kattegat IIIa-S, and Eastern North Sea separately and salmon in the Baltic Sea;

(b) The share of the various species for those groups of species that are internationally assessed, e.g. Megrims, Anglerfishes and elasmobranchs.

B.2.1.3 in present DCF need to be kept but need to be made more generic to cover index rivers in other areas as well as the Baltic

For salmon and eel, data for assessment purposes shall be collected from inland waters. The rivers where such data is collected as well as variables which are to be collected in each of the rivers are decided in Regional Coordination Groups.

Variables to be collected for fishing activities

Core variables to be collected for fishing activities (volume and species composition of discards, lengths....)

Reference to list of fisheries to be sampled agreed with end-users at RCG.

Fall back option if such lists do not exist (proportionate sampling of all fisheries within MS?)

Reference to detailed list on additional variables agreed with end-user at RCG.

### *Sampling intensity*

MS should be obliged to sample the stocks that appear on the priority list. The number of samples should be based on an aspirational precision level for an agreed set of key variables. The planned number of samples by stock should be included in the annual workplan. The aspirational precision levels as such should be agreed with the end-users at the RCG for each stock and variable. Reference list should be made available at a repository

MS should be obliged to sample a certain number of fishing days in order to get estimates of catches for at least a selected part of the fleet. Rules for each region are to be decided by RCG.

The selection of part of fleet/fisheries to sample for catch estimates should be done by the regional coordination group after advice from the end-users. The list of selected part of fleets/ fisheries should be available in a repository.

### *Disaggregation level*

Sampling of stock variables by quarter, (provisions for the spatial units for sampling should be kept from present DCF), it should be possible for the RCGs to amend the requirements for disaggregation levels in stock sampling for certain stocks. Such amendments should be made available at a repository.

Sampling of fisheries. Sampling should be carried out in accordance with best practice

### *Quality requirement*

MS should report on achieved quality for the performance of the sampling programmes as well as the sampled data. The quality assessment should be done using different quality indicators. The quality indicators should be made available at the repository.

### *Exemption rules*

Stock related variables (text from current DCF)

1. The national programme of a Member State may exclude the estimation of the stock related variables for stocks for which TAC's and quota have been defined under the following conditions:

(a) The relevant quota must correspond to less than 10 % of the Community share of the TAC or to less than 200 tonnes on average during the previous three years;

(b) The sum of relevant quotas of Member States whose allocation is less than 10 %, must account for less than 25 % of the Community share of the TAC.

2. If the condition set out in above point 1(a) is fulfilled, but not the condition set out in point 1(b), the relevant Member States under guidance from the RCG will set up a coordinated programme to achieve, for their joint landings, a joint sampling scheme, or Member States may individually set up other national sampling schemes leading to the same aspirational precision as anticipated in the coordinated programme for a joint sampling scheme.

3. If appropriate, the national programmes may be adjusted until 1st February of each year to take into account the exchange of quotas between Member States:

4. For stocks for which TAC's and quotas have not been defined and which are outside the Mediterranean Sea, the same rules established under point 5(1) apply on the basis of the average landings of the previous three years and with reference to the total Community landings from a stock;

5. For stocks in the Mediterranean Sea, the landings by weight of a Mediterranean Member State for a species corresponding to less than 10 % of the total Community landings from the Mediterranean Sea, or to less than 200 tonnes, except for Bluefin tuna.

Remark: Exemption rule needed for sampling of foreign landings (suggestion of RCM Baltic)

### *Variables relating to fishing activities*

MS that do not participate in any of the selected fisheries or have vessels in any of the selected fleets should be released from their obligation.

### *Obligations to support a regional approach*

MS should be obliged to support the work in the regional coordination groups by

- Upload transversal data (census data on volumes, effort and value by métier) in the regional database
- Upload all data sampled through the DCMAP in the regional database
- Assure participation in relevant RCGs (?)
- Supply RCGs with proposal for Annual Workplans
- nominate representatives that can commit to decisions taken by the RCGs

## **3.4 Sampling of salmon and eel (TOR B.4)**

### Conclusion

Salmon and eel data for the stock assessment purposes should be collected under DCF.

Salmon and eel data are needed to:



- carry out single species assessments for these species
- assessment of the economic and social importance of the salmon and eel fisheries (recreational and commercial)

#### Proposed draft text for DCMAP

For salmon and eel, data for assessment purposes shall be collected from inland waters. The rivers where such data is collected as well as variables which are to be collected in each of the rivers are decided in Regional Coordination Groups.

### **3.5 Collection of transversal variables (TOR B.3, B.5, D)**

#### Conclusion

A chapter of the provision of transversal data should be included in DCMAP.

Transversal data are needed to carry out:

- single species assessments
- mixed fisheries assessments
- multi-species assessments
- bioeconomic modelling
- impact evaluation of the fisheries to the marine ecosystem
- evaluation of fishing capacity and fishing effort
- identification and classification of metiers
- assessment of the economic status of the fishery
- disaggregation of economic variables at the metier level
- identification of fleet segmentation

It is assumed that the future data collected through the control regulation is reliable. There are indications that this is presently not the case. In particular, the quality of estimation of discards is questioned and in some areas there may be problems with the reporting of landing and species composition as well. Also several trips of vessels >10 m are not reported in logbooks due to derogations and exemptions that are foreseen by the control regulation. These problems need to be resolved before the problem of overlapping in Control regulation and DCF/DCMAP could be avoided. If data from the Control Regulation are not sufficient, alternative estimation procedures would be needed to be implemented in the DCMAP. This draft assumes the problems to be solved.

#### Proposed draft text for DCMAP:

##### *Variables*

The variables required are listed in Document X (or Appendix X, this would require a revision of the DCMAP if they are changed during the period 2014-2020)

##### *Disaggregation level*

For vessels subject to logbooks the disaggregation level of the collected data is by trip

For vessels not subject to logbooks, the disaggregation level of the collected data is by metier of fishing activity or trip

For fishing activity where no vessel is involved, the disaggregation level of the collected data is by trip (to be decided???)

##### *Sampling strategy*

For vessels subject to logbooks the variables by trip should be supplemented with a fishing activities code. (no sampling is required because transversal data are already collected through the Control Regulation)

For fishing activities and vessels not subject to logbooks Member States shall implement a sampling programme estimating the required parameters on an annual basis. The design of the sampling plan should be in accordance with sound statistical practice.

#### *Quality of data*

Member States shall include in their annual report information on the quality of the data.

### **3.6 Collection of recreational fisheries data (TOR B.5, C.1)**

#### Conclusion

A chapter of the provision of recreational fisheries data should be included in DCMAP.

Recreational fisheries data are needed to:

- carry out single species assessments
- assessment of the economic and social importance of the recreational fishery

There are remarkable differences in the status quo of recreational fisheries data collection between the member states. Some countries are not collecting such data at all, whereas others may have surveys on a regular basis producing estimates of catch volumes by species. Even if the recreational catch levels are not always known, it is evident that recreational catches form a large part of the total catches of some species. The ICES Working Group on Recreational Fisheries Surveys (WGRFS) is the forum for planning the methodology for marine recreational fishery data collection for stock assessment purposes.

Control Regulation ((EC) 1224/2009) obligates member states to monitor recreational catches of stocks subject to recovery plans when recreational fishing is practiced from vessels engaged in recreational fisheries. Fishing from the shore is not included. According to ((EU) 404/2011) data should be collected biennially. National scientific institutes should have access to this data and only data additional to the provisions of the Control Regulation should be collected.

#### Proposed draft text for DCMAP

Member states shall carry out surveys every Xth year to estimate the share of recreational fisheries catches in the total catches of stocks on the “reference priority list”, if no other information to estimate this share is available.

For stocks on the “reference priority list”, where data on recreational fisheries removals is needed for stock assessment purposes or where recreational removals are higher than x % of the total catches, Member States shall estimate the weight of the recreational catches. For salmon and eel, data collection covers the recreational fisheries in both marine and fresh waters.

Depending on the needs of stock assessment methods used for the stock, Member States shall collect biological variables from recreational fisheries removals. Need for such sampling, countries responsible for it, variables to be collected and aggregation levels are decided in the Regional Coordination Groups. Member states describe the methods in their Annual Plans and report the achievements in their Annual Reports.

### **3.7 Regional Database (TOR C.1, C.2)**

#### Proposed draft text for DCMAP

## Management of national primary and metadata

The national computerised databases referred to in Article 13 of Regulation (EC) No 199/2008 shall allow cost efficient exchange of data and information within Member States between involved institutes.

Managing fisheries resources requires the processing of detailed (needs reference to the document/section where it is described) data in order to address specific issues. In that context, Member States should transmit scientific data needed for scientific analysis into a Regional Database that falls under governance of Regional Coordinating bodies and should ensure they have the technical capacity of doing so. If necessary, the detailed data may be aggregated before their transmission, to the level of aggregation stipulated in the request as defined by the end-users.

Member States shall transmit the biological data mentioned in article XX to the relevant regional database by DAY-MONTH of each year. If only provisional data are available, there needs to be a mechanism whereby provisional data can be provided with a time frame developed for the provision thereafter of finalised data.

Member States shall transmit transversal and economic data mentioned in article XX to the relevant regional database by DAY-MONTH of each year.

Member State shall specify the planned transmission of data, including the level of detail and temporal and spatial information, into the Regional Database in its Annual Workplan.

### **3.8 Socio-economic data collection and freshwater aquaculture (TOR A.1, B.2, B.5)**

The subgroup dealt with the proposed integration of social data collection into the framework of the NEW DCMAP. EWG 12-15 plenary concluded to be very cautious about the additional effort that would be necessary to get social data. Further EWG 12-15 concluded to have a clear identification of research questions and following that, necessary data should be identified. Then it has to be evaluated which proposed data are already available from administrative or other adequate similar sources. Finally it shall be evaluated if collection of those additional social data is necessary on a pan-European level or if it should be done regional.

On the proposed integration of freshwater aquaculture into the new DCMAP EWG 12-15 concluded that it is too early to recommended inclusion or not-inclusion of freshwater aquaculture into DCMAP. As a first step costs and justification of this additional data collection should be clearly stated by the EU-Commission. The expert group could not assess the possible costs in detail due to a lack of aquaculture experts representation.

EWG 12 15 further concluded about some amendments of the current data to be collected under DCF, e.g. inclusion of raw material by species and origin into the processing industry data collection and the harmonisation of aquaculture data collected under DCF and by National Statistical Offices und Reg. 762/2008.

Due to new regional approach in fisheries management and possible necessity to analyse spatial distribution of fishery, aquaculture and fish processing it was concluded to evaluate possibility to report data on spatial distribution of some socio-economic indicators (e.g. employment, value added, number of vessels/enterprises, value of production, etc). This should not lead to the collection of additional information and could be done few times during programming period as there is no need to do it annually. The necessity of this kind of data presentation and administrative disaggregation level (NUTS 2 of NUTS 3) should be assessed and justified on the regional level depending on the needs of end users.

## **4 RECOMMENDATIONS OF THE EXPERT WORKING GROUP**

### **Recommendation 1**

Addressed to EU Commission for drafting new DCMAP (TOR C)

It is common understanding that end-user will have a greater role in the RCG (STECF-EWG-12-01, STECF plenary April 2012), but which are these end users and by which mechanism they should intercede with the DC-MAP obligations still need to be clearly specified.

STECF-EWG-12-15 recommends that the RCG mandate regarding financial implications of their decisions have to be clarified.

STECF-EWG-12-15 recommends that the role of the principal forums dedicated to DC-MAP methodological and organizational issues (e.g. PGECON, PGCCDBS, PGMED...) and their interactions with the RCG are to be clarified.

### **Recommendation 2**

Addressed to EU Commission for drafting new DCMAP

Following the recommendation by STECF EWG 12-01 that “regional databases are considered in a revision of the present DCF and that efforts are made by the Commission to facilitate the use of RDBs where Regional Coordination Meetings find it appropriate”, STECF EWG 12-15 proposes to give RDBs a central place in DCMAP by adding the obligation for MS to deliver scientific data for scientific analysis to RDBs under management of the RCMs.

### **Recommendation 3**

Addressed to EU Commission for drafting new DCMAP

STECF EWG 12-15 recommends external review of the list of eligible surveys as well as the list of surveys viable for eligibility as compiled by the 2012 RCMs. This review shall be done prior to the start of DCMAP and the resulting list of eligible surveys shall then be included as list of eligible surveys in the appropriate place in DCMAP, either as Annex or as part of the Master Reference Register. The review shall be based on the earlier review and weighting criteria as defined in STECF EWG 12-01.

### **Recommendation 4**

Addressed to EU Commission for drafting new DCMAP (TOR B.4)

EWG12-15 recommends that DC-MAP should include provisions for collecting eel and salmon data, which is needed for stock assessment purposes. However, the details of sampling, such as the variables to be sampled, number and distribution of samples and targets for the quality of data shall be decided on the regional level.

### **Recommendation 5**

Addressed to EU Commission for drafting new DCMAP (TOR B.5)

Concerning the integration of new, in particular social variables, EWG 12-15 recommends, that as a first step, after possible indicators have been listed in the study “Identification of social indicators in fisheries”, possible end-users and applications have to be clearly defined. Then a pilot study on the feasibility and constraints of collecting such data may be conducted, having in mind that very likely applications are on a regional level.

### **Recommendation 6**

Addressed to EU Commission for drafting new DCMAP (TOR B.2, B.5, D)

Lists of economic variables are still considered to be appropriate. Necessary amendments could be found in chapter 6.9/Annex II of this report. Any additional flexibility should be managed through PGECON.

Collection of economic data on freshwater aquaculture in a way similar to Farming accountancy data networks (FADN) should be explored.

If collection of economic information on the freshwater aquaculture sector is introduced there should be an option for Member States to be exempted from supplying data where the difficulty and costs of supplying these is high in relation to the significance of the industry in that country. The production thresholds applied through FADN might be a useful way to do this.

The Commission should review their aquaculture data requirements and Regulations to ensure coherence between data collections.

Data standards for aquaculture should follow those of the CWP handbook and Regulation (EC) No. 762/2006.

#### Recommendation 7

Addressed to EU Commission for drafting new DCMAP (TOR B.2, B.5, D)

EWG 12-15 recommends a dialogue with EUROSTAT and National Statistical Institutes to evaluate how far they can assist to meet the requirements of the new DCMAP. This could be the provision of existing information, adaptation of existing data collections and the provision of advice on methodology and data standards.

## **5.1 Introduction**

In parallel with the development of the new EU Common Fisheries Policy and the European Maritime and Fisheries Fund (EMFF), the Commission is currently preparing a proposal for a new EU Multi-Annual Programme for data collection for the period 2014-2020 (EU DCMAP). Articles 37 and 38 of the CFP reform proposal set out the broad obligations for Member States to collect biological, technical, environmental and socio-economic data and to cooperate regionally. The EMFF will serve as the financial pillar of the future EU data collection programme, providing the basis for national programmes implementing the EU DCMAP 2014-2020. This new EU multiannual programme for data collection will be adopted as soon as the new Basic Regulation is adopted by Council and the European Parliament.

This item has been on the agenda of several STECF EWG meetings:

STECF EWG 11-02, on the functioning of the current DCF system and on possible improvements for the future.

STECF EWG 11-19, which carried out a SWOT Analysis of DCF.

STECF EWG 12-01, concentrated on content issues of the DCMAP issues for the new DCF, and highlighted necessary decisions on the governance structure, but did not deal with it in detail.

The aim of this STECF EWG is to provide support to the Commission in the drafting of the EU DCMAP.

## **5.2 Terms of Reference for EWG-12-15**

A. Follow-up of discussions on the new EU Multi-annual Programme for Data Collection (DCMAP) 2014-2020.

Review of the results of EWG 12-01.

Review of discussions at 2012 Regional Coordination Meetings and the 2012 Liaison Meeting (24 – 26 September 2012) on the DCMAP.

B. Evaluation of options for the type of data collected under the DCMAP, and for the approaches used for collecting this data. On the basis of the DG MARE non-paper 'Towards a new EU 2014-2020 Multi-annual Programme for Data Collection', address the following:

Repository of best practices for sampling (i.e. statistically sound sampling schemes). Discussion of next steps.

Collection of data on freshwater aquaculture. Would this be feasible? What are the constraints?

Harmonization of the aggregation levels of biological and economic data. Discussion in preparation of the upcoming Workshop in this regard.

Discussion of results of Workshop on Eel and Salmon DCF Data.

Identification of redundant/ new biological, transversal, economic and ecological parameters.

This includes an evaluation of the study 'Identification of social indicators in fisheries'.

C. Evaluation of options for the design/ procedures of the DCMAP. On the basis of the DG MARE non-paper 'Towards a new EU 2014-2020 Multi-annual Programme for Data Collection', addressing the following:

What should be the decision-making process for determining what data should be collected annually?

What provisions should be included in the DCMAP in this regard? The collection of what data should be excluded from the outset at this level?

What should be included in the EMFF Operational Programmes of Member States (chapter on data collection) in this regard?

What should be the scope of decisions taken by RCMs, end users and DG MARE annually in this regard? (By means of contributions to the drafting of Annual Work Plans.)

Annual Work Plans.

What should be their content?

What should be their format? What should be the changes relative to Annual Reports under current DCF?

A draft Annual Work Plan is to be produced.

D. Link of DCMAP to other legal texts?

Refer to report by external consultant MRAG on the evaluation of the DCF, with section identifying overlaps between the DCF and other regulations such as the Control regulation and the Marine Strategy Framework Directive.

How can overlaps be avoided in the future, how can synergies be exploited?

E. Glossary of main biological, transversal, economic and ecological parameters in the DCF.

F. AOB

## **6 DETAILED REPORTS ON SPECIFIC TOPICS OF TOR**

This chapter contains the reports prepared by the sub-groups during STECF EWG 12-15 in order to address the TOR properly and to give thorough support to the Commission for the drafting of the EU DCMAP

### **6.1 Strengthening the RCM role**

Details of the new role to be given to RCM as laid down by EWG-12-01 and endorsed by STECF April 2012 plenary may be summarized as follows:

- RCM must become a platform for planning of sampling activities on a regional scale, agreeing the national shares in the regional sampling programme, evaluation of the quality of the data and the calculation of biological parameters on a regional level;
- RCM could be a dialogue platform with legitimate end users;
- RCM would need participation of MS representatives which have a mandate to take decisions;
- MS would need to spend more time in preparation for the RCM.

STECF-EWG-12-01 recommended that RCM activities to be given greater authority in determining regional sampling programmes and to oblige Member States and relevant end-users to collaborate fully in RCM activities when assessing and agreeing priorities within regional sampling programmes.

STECF-EWG 12-01 also recommended that the EU DCMAP (Data Collection Multi-Annual Plan) should define the general rules for the selection, on a regional basis, of fisheries to be sampled and data quality requirements and refer to the RCMs for the detailed technical planning of sampling. This includes RCMs to identify the métiers that are the priority for work at the EU level within a region, and those should be the priorities for work in Member States

STECF concluded that a move towards regionalisation of collection of biological data could increase the usability of data for end users and improve the efficiency of the collection in the MS. The regional approach is also in line with the shift towards a more regionalised management of fish stocks as proposed in the CFP reform proposal (COM(2011)425 final). STECF, however, emphasised that it was important that the core of the methodology as well as the definition of collected parameters is stable over time.

STECF concluded that to ensure a common understanding of the terms of the DCF, a glossary with clear definitions should be produced. STECF therefore reiterated its previous recommendation from PLEN 11-03.

STECF concluded that the JRC web-based storage space for reference documents and tables should be continued and be further developed to take account of future requirements of the DCF in order to continue to facilitate the application of best practices in designing Annual Work Plans.

### **Turning the RCM from a set of meetings to a full process**

Increasing the usability of data for end-users, improving the efficiency of the collection in the MS, coherence with the regionalized management of fish stocks proposed in the new CFP, are the main reasons, as recalled by STECF, for strengthening the role of the RCG.

STECF-EWG-12-15 reflected on the implications of strengthening the role of the RCM and how this could be spelled out in the EU DC-MAP. From the past experience, it is clear that the RCM meeting must be a decisional forum and that all materials for the decision making must be prepared in advance. The inter-sessional work has always been problematic and in almost all cases data processing and other analyses were made during the RCM leaving no or little time for coordination itself. The solution resides in changing the RCM into a regional coordination continuous process, changing RCM to Regional Coordination Group (RCG), and this can be done by



- Appointing RCG focal point(s) in each Member State, with
  - the mandate to ensure that all regional inter-sessional work is carried out in due time
  - The authority to take decisions binding to their own the country
- Appointing RCG executive groups of a limited number of experts, lead by the chair, with the mandate to stir the regional activities together with the RCM focal points.
- Anticipating man-month and financing of regional coordination activities throughout the year within the DC-MAP

The structure of the Annual Workplan should also reflect the importance of the regional approach. To this end, the regional programme should be the first title level in the sectioning of the report, with modules section and their sub-sections coming in a second stage.

STECF-EWG-12-15 emphasizes on the need to have a repository for the Master Reference Registers and web facilities for RCG work.

### **RCG responsibilities**

For all Master Reference Register which DCMAP refers to and are not included in the legislation, procedures must be established describing how to update these documents. Since these documents are referred to in the Annual Work Plans of the MS and provide a legal basis for the activities proposed by the MS, it is desirable that changes in these documents are limited as much as possible. It is also required that version control is introduced in the management of these documents. In cases that references are made to these documents in the Annual Work Plans and Annual Reports, it should also refer to the version which has been considered.

Initial questions to be resolved in the DC-MAP, upon candidate variables to be part of the Master Reference Register are given below:

- Manage list X1 of transversal variables and of the level of aggregation. It is unclear whether the responsibility is with the Commission or the RCG. It is also unclear whether these variables would differ between regions since they are also used by economist which may work at a different level.
- Manage document X2 of rules of good practice for sampling. Should be managed at a pan-Europeans level because the rules cannot be different between regions. Role of the Liaison Meeting and input from scientific experts on sampling design to be clarified.
- Manage list X3 of species subject to biological sampling by Region specifying sampling requirements in consultation with end user.
- Manage list X4 of species and stocks for which recreational fisheries should be sampled in a regional level
- Manage list X5 of such rivers and inland waters in a regional level where salmon and eel are to be sampled

The terms of reference given to the RCG should contain, at least, the following:

- Evaluate the proposed Annual Work Plans (AWP) in relation to the regional requirements specified in list X3 and propose and agree modifications to the AWP to achieve the regional requirements.
- Share the views and advise MS on their proposed Annual Work Plans in relation to application of rules of good practice as detailed in document X2.
- Evaluate the proposed NWP in relation to the required biological parameters specified in list X3 and propose and agree modifications to the AWP to achieve the regional requirements.

- Identify specific needs for disaggregated economic fleet data (STCF-EWG-12-01)
- Define aggregation of fleet data relevant at the regional level resolving the confidentiality problems encountered at national level (STECF-EWG-12-01)
- Discuss on compilation of indicators to assess the importance of fishery and related activities at the level of administrative areas (STECF-EWG-12-01).
- If required produce a data-call to the MS to upload data in the Regional Data Base (RDB)
- Rank the fishing activities on a regional level according to agreed criteria, in order to assess the sampling responsibilities and agree on exemption rules
- Contribute to the evaluation of the quality of the data uploaded in the RDB by MS.
- Take its role in maintaining and further developing the RDB
- manage and evaluate bilateral agreements between MS

It is common understanding that end-user will have a greater role in the RCG (STECF-EWG-12-01, STECF plenary April 2012), but which are these end users and by which mechanism they should intercede with the DC-MAP obligations still need to be clearly specified.

STECF-EWG-12-15 recommends that the RCG mandate regarding financial implications of their decisions have to be clarified.

STECF-EWG-12-15 recommends that the role of the principal forums dedicated to DC-MAP methodological and organizational issues (e.g. PGECON, PGCCDBS, PGMED, ...) and their interactions with the RCG are to be clarified

### **Consequences for DC-MAP**

RCG must prepare the details of the annual workplan (list of stocks, ...) and evaluate the annual workplan against the regional requirements of the DCMAP before final submission (see LM recommendations also)

2 meetings to be prepared in 2013

## **6.1 Suggestions for an institutional framework of the new DCMAP**

### Purpose:

The new DCMAP is intended to have a more regionalized approach in coordinating actions undertaken by Member states (MS) in order to fulfill their data collection needs and legal obligations. This is in particular done to assure more flexibility of the data collection programmes to changes of end-users need. EWG 12-01 already discussed this issue in general. This contribution aims to sketch a possible institutional set-up of decision making processes, including e.g. decision/initiative rights and majority rules.

### Principles:

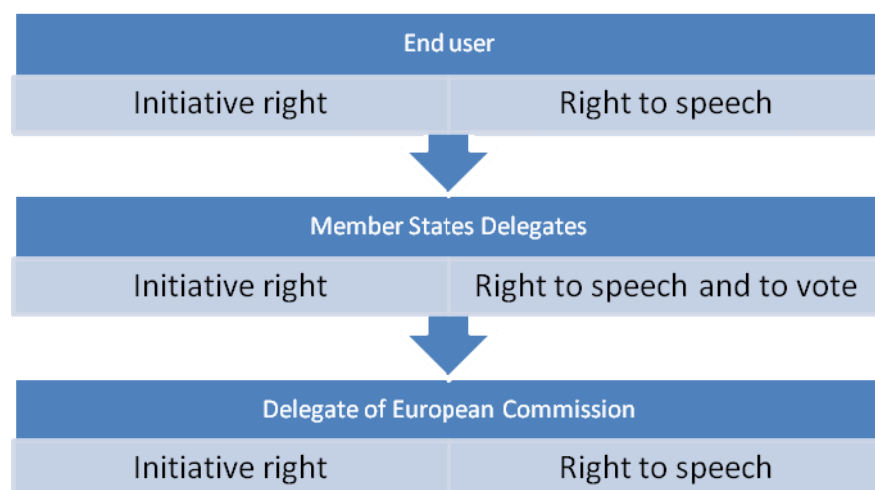
- End user/scientific needs shall be fulfilled
- Core data collection shall be ensured in order e.g. to remain necessary time series

- Decision making shall be efficient
- Member States shall not be “beggared by their neighbors”
- Changes and adaption shall base on scientific rationale
- Ensure high scientific quality of the data collected
- Follow the regionalisation approach

Assumption:

A decision on the first data set to be collected for CFP needs has been made. This means, that this proposal focus on adaption and changes of data collection programmes.

## Regional Coordination Group



European Commission will remain last resort due to veto right

Agreed decisions can come into force quite quick

New end user needs can be fulfilled without changing regulations etc.

Justified end user needs can be fulfilled in an acceptable time frame

STECF will remain the scientific advisory body of EC

Member States will have the first decision rights. Can be overruled by majority of other MS or by European Commission only if scientifically justified. Disagreement will postpone changes coming into force – costs.

MS cannot finally withstand scientifically

## Regional Coordination Group (RCG)

Consists of different groups with different rights

End users/Member states or EC may bring up new data collection needs (e.g. new stocks or new best practices for sampling)

RCG discusses if necessary and decides by simple majority rule

If all MS agree, changes/adaptation are accepted and EC has a veto right to be declared in between one month.

Member States that do not agree have the right to bring the issue to EC in between 1 month. EC shall ask STECF for scientific advice on the issue. STECF may bring the issue to an EWG/PGECON and final advice shall be given at last at the second plenary of STECF following the request of a MS.

European Commission can reject STECF advice by veto within one month.

**Result is binding.**

Some thoughts: Should core programme be more protected against changes, e.g. whole or specific content of first data collection programme (core programme) under DCMAP can only be skipped if all MS and European Commission agree? Additional data collection would fall under the decision rules above.

Need also to focus on ‘trade-offs’, i.e., when new requirements are brought forward something else may need to give. Similarly we can probably sample loads of species from relatively few trips or fewer species from loads of trips, but we cannot sample loads of species from loads of trips – the point being that end-users need to understand this and be prepared to accept negotiation – not just present us with escalating demands

## 6.2 Surveys under DCMAP

STECF EWG 12-15 discussed the continuation, inclusion and evaluation of surveys under DCMAP. STECF EWG 12-15 acknowledged the work carried out during STECF EWG 12-01 and, in principle, subscribes the following recommendations emerging from that group:

1. STECF-EWG 12-01 recommends that in terms of timing, proposals for revisions of the list of surveys should be available in June 2012, discussed at the RCMs in July-September 2012, incorporated into STECF EWG 12-15 on the DCF review (part 2) and endorsed by STECF Plenary in November 2012.
2. The STECF-EWG 12-01 recommends that the weighting criterion used in the evaluation of the surveys for inclusion in the list of eligible surveys should be reviewed as for some regions the management of the fish stocks in near future probably will be based on an ecosystem management approach.
3. STECF-EWG 12-01 recommends that the different RCMs during 2015 should complete a list of all the research surveys carried out within each the region and at the same time conduct a review of these surveys.

Also, STECF 12-07 recommended the following, based on suggestions in STECF 12-01: *“Eligible research vessel surveys should be frequently subject to evaluation against criteria which justify eligibility. In order to maintain stability, it is proposed that, if a survey no longer qualifies, it should be put on an observation list. If it remains on this list for three successive years, it will be removed from the list of eligible surveys.”*

**Recommendation:**

STECF EWG 12-15 recommends withdrawing the scheduled review of the list of eligible surveys by STECF November plenary.

**Recommendation:**

STECF EWG 12-15 recommends external review of the list of eligible surveys as well as the list of surveys viable for eligibility as compiled by the 2012 RCMs. This review shall be done prior to the start of DCMAP and the resulting list of eligible surveys shall then be included as list of eligible surveys in the appropriate place in DCMAP, either as Annex or as part of the Master Reference Register. The review shall be based on the review and weighing criteria as defined in STECF EWG 12-01.

In 2012, the respective RCMs reviewed the list of eligible surveys and added surveys to this list for potential inclusion in the list of eligible surveys. STECF EWG 12-15 suggests, as was suggested by STECF-EWG 12-01, to review the complete list of current, as well as potential surveys prior to the introduction of DCMAP. This review should be done by an external party. The deadline for a final

review by STECF plenary as proposed in STECF-EWG 12-01, November 2012, has to be postponed according to the progress of the development of DCMAP. However, given the time consuming review, the review process itself should be initiated as soon as possible.

As STECF EWG 12-01 suggested and STECF 12-07 agreed upon, STECF EWG 12-15 is of the opinion that eligible and proposed surveys should be evaluated for continued eligibility or inclusion in the list of eligible surveys. This review also includes the option to put a survey on an observation list. STECF EWG 12-15 recommends that at the DCMAP mid-term review the list of surveys is reviewed as well. To facilitate this review, the RCMs shall compile a complete list of all surveys (Proposed surveys, DCF surveys as well as national surveys) in their area and this list is reviewed again for eligibility. This compilation shall address all the data needed for the review and takes into account the criteria as specified at STECF EWG 12-01. This review should also include a review of the cost effectiveness of a survey.

Surveys under the DCF in general serve the needs for advice under the CFP. Even though the current trend is to move towards multi-purpose surveys covering more research subjects e.g. stomach content and data requests for MSFD parameters, the expansion of surveys in terms of e.g. vessel time and labour is not eligible under the DCMAP. However, Member States are encouraged to use survey time as efficient as possible for additional work, but as this is additional survey work, serving other regulations than DCMAP, this work, including the relevant proportion of ship's time on the survey, has to be funded from other sources.

Many surveys are designed to be carried out by multiple vessels from various MS. The success of a survey also often depends on full area and time-frame coverage. MS committed to a survey shall have the obligation to continue their participation in a survey as long as MS has a share in the stocks under research by the survey. Also, MS that have a share in a stock and currently do not contribute to a survey shall have the obligation to do so. This participation can be done through full MS participation by delivering vessel time, experts and funds, or partial participating by funding the survey through a distribution key for cost-sharing, as currently done in e.g. Blue Whiting Survey. Current, well established surveys shall be continued on the same basis without revisiting funding and participation.

### ***Text proposal:***

#### **Research surveys at sea**

Member States shall carry out research surveys at sea to evaluate the abundance and distribution of stocks, independently of the data provided by commercial fisheries, and to assess the impact of the fishing activity on the environment.

For new surveys or surveys without participation of all Member States involved, Member States having a share of minimum XX% in landings of a stock covered under a survey shall participate in surveys as listed in Annex XX through (partial) funding and/or providing experts and/or vessel time.

The list of research surveys at sea eligible for the Community financial assistance, as referred to in Article XX, is provided in the multi-annual Community programme and shall be adopted with the procedure referred to in Article XX.

On the basis of advice from the STECF, the Commission may evaluate and update the list referred to in paragraph XX and authorize Member States to make modifications in the design of the research surveys at sea.

#### Research survey data delivery

Member States shall ensure that the primary data collected under the research surveys at sea are transmitted to international scientific organisations and appropriate scientific bodies within regional fisheries management organisations in accordance with the international obligations of the Community and the Member States. The timeframe for transmitting data should be in the member State's AWP and be treated as a performance statistic in its annual report.

### **6.3 Variables related to stocks and fishing activities**

Stocks and fisheries are sampled in order to get information on

- size (age and/or length) structure of the landed part for selected stocks
- size (age and/or length) structure of the discarded part for selected stocks
- sex, maturity and fecundity by size for selected stocks
- weight by size for selected stocks
- species composition and volume of discards in selected fisheries

The information obtained from the catch sampling are needed to carry out e.g

- single stock assessments
- mixed fisheries assessments
- evaluation of technical measures
- defining size structure in the stock

Variables related to stocks and fishing activities was intensely discussed in EWG 12-01.

EWG 12-01 concluded that the present DCF is considered to be very prescriptive in defining which data needs to be collected but also in the way they should be collected. The EWGs opinion is that the new DCF should be more flexible. The collection of the core data needed for provision advice should maintain, but the way they are collected (sampling schemes) should be decided on a regional level by the relevant Regional Coordination Meeting (RCM). Also, the priority fisheries to be sampled should be selected on a regional basis rather than on a national basis.

The proposed flexibility in the new DCF should result in data which can be better used by end users. Therefore, end users should be in a position to be able to explain what data they need.

When designing Annual Work Plans, best practices for sampling (e.g. statistically sound sampling

schemes) have to be applied and implemented. This obligation should be defined in the legal text on the EU MAP. The best practice must be documented, stored centrally (e.g. in a document repository) and referenced in MS OPs and Annual Work Plans.

STECF-EWG 12-01 recommends that the EU DCMAP should define the general rules for the selection, on a regional basis, of fisheries to be sampled and data quality requirements and refer to the RCMs for the detailed technical planning of sampling. This includes RCMs to identify the metiers that are the priority for work at the EU level within a region, and those should be the priorities for work in Member States.

STECF April Plenary 2012 concluded that a move towards regionalisation of collection of biological data could increase the usability of data for end users and improve the efficiency of the collection in the MS. The regional approach is also in line with the shift towards a more regionalised management of fish stocks as proposed in the CFP reform proposal (COM(2011)425 final). STECF, however, emphasises that it is important that the core of the

methodology as well as the definition of collected parameters is stable over time. If that is not the case, there is a risk that end users' changing data needs as well as changing political objectives on the regional scale, could result in interrupted or effectively truncated time series. Furthermore, it is important that regional sampling schemes do not affect the ability to standardise the data collected for the DCF with pan-European data requirements in other EU regulations, particularly the Control Regulation (COM Council Reg.1224/2009).

EWG 12-01 concluded that metiers are not appropriate to be identified as a targeted unit for sampling of the biological characteristics of landings – this is for a number of reasons that have been outlined by the various ICES workshops on sampling. It was concluded to not have the sample requirements of a revised DCF mapped out in terms of the requirement to target metiers for sampling.

EWG 12-01 concluded that there is no need to set a priori precision targets for the variables to be collected. Presently, there is no basis for setting such targets. In many cases, it would also be impossible to evaluate how many sampling resources would be needed to meet predefined targets. Instead EWG 12-01 proposes to set a minimum sampling target, remaining at least at the present level. However, it would be required to evaluate the quality of the data every year at the regional level (RCM) and end user aggregation level.

The EWG 12-15 discussed based on the outcomes of EWG 12-01 how sampling of variables related to stock and fishing activities could be outlined in the new DCMAP. There was a general agreement that details prescribing the sampling as much as possible should be managed outside the actual regulation. Details on stocks and fleets to be sampled as well as variables and periodicity in the sampling should be outlined by the RCGs and stored in a common repository. The main reason for keeping the details outside the regulation is to keep the system flexible and to include end-users process of prioritizing. Some of the main identified challenges in such system are i) to find a balance between flexibility to meet evolving end-user needs and stability to maintain time-series and ii) to identify principles to establish minimum sampling effort for MS within the DCMAP.

Minimum sampling requirements need to be established in order make sure that MS maintain a sampling effort. From a MS point of view could it also be of importance to know how large the sampling obligation is. The *distribution* of sampling effort between stocks and/or between fleets could then be arranged in the RCGs.



To maintain stability in the system it is advisable that principles for the variables to be sampled are described in the DCMAP. MS could for example be obliged to sample stocks on a list agreed by the RCG. The DCMAP could stipulate that the list should contain stocks assessed and/or managed by international bodies.

The EWG 12-15 discussed the métier concept. Metiers have as pointed out in EWG 12-01 been found unsuitable as sampling strata for landings and catches. The main reason for this is that fishing operations often only can be assigned to métiers after they have taken place and that they thereby violates principles of probability based sampling. Metiers should instead be considered as domains of interest. Since probability based sampling is foreseen to be important in the “statistically sound best practice” is it undesirable to keep métier sampling in the DCMAP. Sampling of fishing operations should be done in accordance with best practice and based on appropriate sampling frames.

The métier concept has however been successful in the present DCF for classifying fishing operations in a standardized way between MS. This has allowed for regional overviews in the RCMs on how effort, value and volume of catches are distributed. It is thereby recommended that the system of classifying fishing operation into métiers is kept in the future DCMAP and that all transversal data as well as sample data is/could be assigned to a métier. Sampled data should also be assigned to métier using the established codes already provided by the RCMs.

EWG 12-15 discussed on stocks and variables covered by the DCMAP. It was agreed that there is no need for a list specifying the stocks to be sampled to be included in the actual regulation. Instead it is suggested that the DCMAP specifies that MS should be obliged to sample the stocks on a priority list (P1) for variables specified by the RCG. It was agreed that P1 list should contain all stocks that are assessed by an international body and/or are internationally managed. The list could also include stocks for which there is a clear plan to initiate an international assessment work. The DCMAP should define the justification of P1 stocks. It was agreed that the RCGs should be given the role to compile the actual list of stocks in cooperation with the end-users. The DCMAP needs to specify the core variables to be sampled for stocks. The core variables are the variables present in DCF annex VII. However all variables do not need to be collected for each stock. The RCGs should thereby, in cooperation with the end-user, specify which variables that needs to be collected for each stock as well as the periodicity for this collection. The RCG should be given this role in DCMAP. In the absence of clear advice from the RCGs in 2013 annex 7 in the DCF could be used as a starting point. Some kind of threshold need to be applied in cases were MS only have a small part of the quota/landings. Exemption rules are present in DCF and those rules could be kept.

EWG 12-15 discussed quantitative targets for sampling effort. The DCMAP should not include details on sampling effort (number of fish to be sampled etc) but there need to be a quantitative target in the regulation to ensure sufficient sampling by the MS. Such quantitative target could be aspirational precision levels. MS should also be obliged to sample in accordance with sound statistical practice. This practice need to be elaborated more in detail but could include identification of objectives, identification of study population, identification of sampling frames, selection methods for sampling, routines for non-responses etc.

EWG 12-15 discussed how quality could be evaluated and assured. In the present DCF precision (CVs) is the “standalone” indicator of data quality. Even if data is precise it could be corrupted by bias. Quality indicators could relate to the design, performance and documentation of the sampling programme as well as to the output data. Quality indicators need to be developed by relevant expert groups. The DCMAP needs to assure that MS are obliged to report on the quality of the data in

accordance with the indicators. The indicators themselves do not need to be included in DCMAP. Annual work plans should be evaluated against a best practice. Guidelines on the application of best practice in statistically sound sampling programmes in a national as well as in regional sampling designs need to be developed. EWG 12-15 is aware about the ICES WKPICS2 (Workshop on Practical Implementation of Statistical Sound Catch Sampling Programmes) that will meet in November 2012. This workshop will focus on how to achieve effective sampling designs at a regional (internationally coordinated) level to address regional data needs, and how to evaluate and document the quality of these data sets in a way useful to end-users.

EWG 12-15 discussed the need for sampling of fisheries at sea. In the DCMAP MS should be obliged to carry out sampling of catches in fisheries to achieve estimates on discards as well. In a discard ban or an obligation to land all catches management regime a new sampling approach has to be developed. Concerning the present information on the new CFP proposal a discard ban will not be implemented for all species. Therefore, sampling schemes where sampling of “discard ban” species can be made at landing site and sampling of other species should be made at sea need to be developed. As for the stock sampling a quantitative target needs to be included in the regulation to ensure sufficient sampling by the MS. One idea is that MS should be obliged to sample a given number of trips or fishing days. This number could be derived from e.g. a proportion of the fishing effort in the MS. The RCGs should though be given the role to, in cooperation with the end-users, decide on which fisheries or fleets that should be covered by catch sampling programmes (how the available sampling days can be used in a regional context). MS that do not participate in any of the selected fisheries or have vessels in any of the selected fleets should be released from their obligation to sample. Catch sampling programmes should get information from the entire catch not only the landings but does not necessarily have to be observer programmes. Best practice on validation of self sampling programmes and CCTV need to be developed.

The EWG 12-15 discussed sampling of foreign landings. The general rule is that stocks need to be sampled by the ones that have access to the fish. This implies that the obligation to sample landings in foreign countries must be in the MS of first sale. It should however be the MS of the flag country that are responsible for establishing bilateral agreements, having in mind the following: In an ideal case, all Member States would carry out statistically sound sampling in which all landings into their country, including landings from foreign vessels, are captured within their sampling frames. Under a truly probabilistic sampling scheme those vessels would be sampled by the host nation and used by the host nation in its raising process (this also requires data on all such landings into the host country to be available – i.e. including the non-sampled landings from foreign vessels). You would only need bilateral agreements if, as a Member State, you excluded foreign vessel from your sampling frame which would probably be the case if you were not carrying out a fully-inclusive sampling scheme.

The DCMAP needs to include a threshold releasing MS from their obligation to sample in cases were only minor parts of the overall landings occur in foreign countries. Such thresholds have been discussed in the RCMs and in the LM 2011.

## Structure of the present DCF

### **B1. Metier-related variables**

1. *Variables*
2. *Disaggregation level*
3. *Sampling strategy*
4. *Precision levels*
5. *Exemption rules*

### **B2. Stock-related variables**

1. *Variables*
2. *Disaggregation level*
3. *Sampling strategy*
4. *Precision levels*
5. *Exemption rules*

Suggestion for structure and elements to be included in future DCMAP (by no mean complete)

## 1. **Variables related to stocks and fishing activities**

### *a) Sampling strategy*

MS should perform sampling programs to achieve estimates on needed for evaluation of stocks and fisheries. Sampling should be carried out in accordance with best available practice for statistically sound sampling.

Reference to best practice document. This document should be adopted by STECF.

MS should in their AWP include a detailed description of the design of the national sampling programme and a description of how probabilistic selection takes place in the various components and stages of the scheme.

### *b) Variables*

#### Variables to be collected for stocks

MS should be obliged to sample stocks that appear on a reference priority list. This list should be agreed with end-users at RCG and should be available at a specific repository.

Both landings and discards should be sampled for the core variables if the stock appears on the list. RCGs may, after consultation with end-users, agree on derogation to sample discards for biological variables for certain stocks if the discard rate is low or if data is not used by the end-users.

The DCMAP should state what type of stocks that should appear on the list. Stocks that are assessed by an international body/RFMO and/or are internationally managed should appear in the list. Additional stocks can be added after agreement with end-users in RCG and adoption by STECF subject to realistic expectations in terms of overall sampling levels to avoid unlimited increases in the obligations placed on Member States..

Core variables are the variables in the present DCF annex VII, all variables are not core variables for all stocks. RCGs have to work out details. List of variables to be sampled by stock should be in a repository.

Keep updated annex VII as fall back option if RCG lists do not exist.

Reference to detailed list on additional variables agreed with end-user at RCG.

#### Variables to be collected for fishing activities

Core variables to be collected for fishing activities (volume and species composition of discards, lengths....)

Reference to list of fisheries to be sampled agreed with end-users at RCG.

Fall back option if such lists do not exist (proportionate sampling of all fisheries within MS?)

Reference to detailed list on additional variables agreed with end-user at RCG.

*c) Sampling intensity*

MS should be obliged to sample the stocks that appear on the priority list. The number of samples should be based on an aspirational precision level for the core parameters. The planned number of samples by stock should be included in the annual workplan. The aspirational precision levels as such should be agreed with the end-users at the RCG for each stock and variable. Reference list should be made available at a repository.

MS should be obliged to sample a certain number of fishing days in order to get estimates of catches for at least a selected part of the fleet. This number of fishing days should be based on statistical analysis in order to achieve reliable estimates of catches. However, it is realized that the number of days most likely will be based on available funding.

The selection of part of fleet/fisheries to sample for catch estimates should be done by the regional coordination group after advice from the end-users. The list of selected part of fleets/ fisheries should be available in a repository.

*d) Disaggregation level*

Sampling of stock variables by quarter, (provisions for the spatial units for sampling should be kept from present DCF), it should be possible for the RCGs to amend the requirements for disaggregation levels in stock sampling for certain stocks. Such amendments should be made available at a repository.

Sampling of fisheries. Sampling should be carried out in accordance with best practice

*e) Quality requirement*

MS should report on achieved quality for the performance of the sampling programmes as well as the sampled data. The quality assessment should be done using different quality indicators. The quality indicators should be made available at the repository.

*f) Exemption rules*

Stock related variables (text from DCF)

1. The national programme of a Member State may exclude the estimation of the stock related variables for stocks for which TAC's and quota have been defined under the following conditions:

(a) the relevant quota must correspond to less than 10 % of the Community share of the TAC or to less than 200 tonnes on average during the previous three years;

(b) the sum of relevant quotas of Member States whose allocation is less than 10 %, must account for less than 25 % of the Community share of the TAC.

2. If the condition set out in above point 1(a) is fulfilled, but not the condition set out in point 1(b), the relevant Member States may set up a coordinated programme to achieve, for their joint landings, a

joint sampling scheme, or Member States may individually set up other national sampling schemes leading to the same aspirational precision as anticipated in the coordinated programme for a joint sampling scheme.

3. If appropriate, the national programmes may be adjusted until 1st February of each year to take into account the exchange of quotas between Member States:

4. For stocks for which TAC's and quotas have not been defined and which are outside the Mediterranean Sea, the same rules established under point xy apply on the basis of the average landings of the previous three years and with reference to the total Community landings from a stock;

5. For stocks in the Mediterranean Sea, the landings by weight of a Mediterranean Member State for a species corresponding to less than 10 % of the total Community landings from the Mediterranean Sea, or to less than 200 tonnes, except for Bluefin tuna.

Exemption rule needed for sampling of foreign landings (suggestion RCM Baltic)

Variables relating to fishing activities

MS that do not participate in any of the selected fisheries or have vessels in any of the selected fleets should be released from their obligation.

*g) Obligations to support a regional approach*

MS should be obliged to support the work in the regional coordination groups by

- Upload transversal data (census data on volumes, effort and value by métier) in the regional database
- Upload all data sampled through the DCMAP in the regional database
- Assure participation in relevant RCGs (?)
- Supply RCGs with proposal for Annual Workplans

## **TRANSVERSAL DATA**

### **EWG 12-15 comments**

Conclusion: a chapter of the provision of transversal data should be included in DCMAP.

Transversal data are needed to carry out:

single species assessments

mixed fisheries assessments

multi-species assessments

bioeconomic modelling

impact evaluation of the fisheries to the marine ecosystem

evaluation of fishing capacity and fishing effort

identification and classification of metiers

assessment of the economic status of the fishery

disaggregation of economic variables at the metier level

identification of fleet segmentation

A distinction needs to be made between vessels which are subject to logbooks and vessels which are not. The latter ones being vessels <10 m which comprise a large part of the fleet in terms of the number of vessels .

For vessels which are subject to logbooks transversal variables are collected through the control regulation. No additional variables need to be collected through the DCMAP. Actions in DCMAP to these vessels are:

label trips of these vessel with metier codes

metiers identified at level 6 in table x

metier codes from document x

transversal parameters listed in document y (to be produced at later stage) see also the report of EWG 12-01

It is assumed that the future data collected through the control regulation is reliable. There are indications that this is presently not the case. In particular, the quality of estimation of discards is questioned and in some areas there may be problems with the reporting of landing and species composition as well. Also several trips of vessels >10 m are not reported in logbooks due to derogations and exemptions that are foreseen by the control regulation. These problems need to be resolved. Otherwise alternative estimation procedures need to be implemented in the DCMAP which would lead to duplication of data collection and different estimates of the same parameters. STECF is of the opinion that both duplication and the existence of multiple estimates of the same parameter should be avoided.

For vessels which are not subject to logbooks there are two alternative to collect transversal variables. These are typical small vessels <10 m which comprise a large part of the European fleet in particular in the Mediterranean plus all fishing trips that are under derogation for the compilation of logbook.

bring these vessels under the logbook obligation or implement an alternative obligation in the control regulation which provides the required information. In that case no further action is needed and the comments given to vessels subject to logbooks apply although this has the risk that data would not be reliable.

alternatively MS to implement a monitoring programme estimating the transversal parameters listed in document y (with indication of achieved quality). An expert group to come up with description of good practice procedure to collect transversal data

### **adjustment of the control regulation**

In general it should be checked that the transversal variables provided by the control regulation are in the required units, in particular the effort variables. For set nets, the soaking time should be included.

If new transversal variables are introduced, these need to be collect by the Control Regulation.

In the comments of STECF PLEN 12-01 on the report of EWG-12-01 it states the following vision

In relation to the revision of the new DCF, STECF would like to reiterates its previous recommendation from PLEN 11-01. “STECF recommends that overlap in the Control Regulation (CR) and the DCF should be avoided. Data collected under the CR should not be included in the DCF unless it is to be expected that the quality of the data collected under the CR does not fulfill the quality requirements of the DCF.

STECF further recommends including in the new DCF commitments for Member States to set up at national or regional level, a system to encourage cooperation between control authorities and the National Programmes of the DCF. The cooperation system should address all issues of relevance for the collection and processing of data to be collected under the CR and the DCF.

### **Access to and use of transversal data**

Transversal data are collected predominantly under the articles of the control regulation. Provisions for the transmission and use of transversal data for scientific analysis is predominantly contained in the current DCF framework regulation and in future it will be enacted under articles 37X and 38 of the revised basic regulation or subordinate legislation/rules.

There are indications that Member States currently differ in their interpretation of the obligations to transmit transversal data for scientific use.

In the special case of data from vessel monitoring systems, automatic identification systems and vessel detection systems collected under the control regulation, there is explicit provision for primary data to be transmitted to Community agencies and competent authorities of the Member States engaged in surveillance operations for the purpose of maritime safety and security, border control, protection of the marine environment and general law enforcement.

To avoid national control agencies frustrating the aims of the CFP, scientific analyses that require use of the data mentioned in (3) should be considered a part of surveillance operations for the purpose of protection of the marine environment and, in that context, Member States should identify national scientific institutions that they consider to be exercising a function of government working in support of the CFP and can therefore be considered a branch of the competent authority to which such primary data can be transmitted. In other words these scientific institutions should be considered to be legitimate recipients and users of the data as part of a country's competent authority.

The provisions of (4) should be extended to all transversal data that are collected under the control regulation.

Scientific institutions identified under paragraph 4 as part of a country's competent authority must respect the provisions of data protection outlined in the control regulation and ensure that any subsequent data transmission to users outwith the competent authority does not breach those provisions.

#### **Additional information on the vessel<10 m in the European Union (from RCM-NA 2012)**

Vessels under 10 meters long represent more than 70% of the EU fishing fleet. Although the individual level of catch could be low, the number of boats involved and the high value of the targeted species give to that segment a big socio-economic importance, especially at national level. Vessels in this segment interact also with bigger ones by exploiting the same stocks and otherwise are operating in various coastal areas. Such an important component of the EU fleet must be considered by DCMAP.

Monitoring small scale fisheries is not easy for the following reasons:



Collection of transversal variable is difficult for these fleets composed often of polyvalent vessels involved in several metiers every month, using many types of gears changing along the seasons.

These boats are not subject to the logbook regulation and a part of the vessels activities results are not covered by official declarative documents (fishing forms, sales notes). Landings compositions are often the combination of several fishing activities during a trip using several types of gears, mainly when passive gears are used. So MS had to implement specific sampling plans to identify fishing activities and estimates catch and effort.

In many case the size of the vessels do not allow observers to embark for safety reasons and sampling at sea for catch or discards is particularly problematic. Generally, in most MS such vessels do not sell their catch under official markets, so landings sampling is carried out in difficult conditions directly on landing places. Self sampling programmes could allow to collect data on discards, but with usual doubt on the reliability of these data.

Most of time, volumes of catch are low and the collection of sufficient biological samples is a difficult, time consuming and costly task.

From the view of data collection, the introduction of log books for these vessels would solve of the major problems such as estimation of the catches and effort. In the absence of log book information, guidelines are required how to sample these fisheries in accordance with good statistical practice, taking into account the specific logistic problems for sampling.

The desirable information, needed for these fisheries would include:

the fleet capacity and its geographical distribution,

the main activities and their seasonal patterns,

total catch and effort

specific catch and effort for the main target species and length/age distribution, when these species are assessed at national or regional level.

information to be provided by economists

As these fisheries do mainly operate in coastal areas, the information from this fishery may also be important to estimate the impact of the fisheries on the nursery function of these areas and the distortion of the habit.

## Extract from the report of EWG 11-02

TABLE 7.1 from EWG 11-02 Linking the Control Regulation and the Data Collection Framework

CR		DCF	Comments
Subject	Data type	Module/section with data overlap with the CR	
General conditions	Fishing licence - capacity data	Fleet segment (economic data)	
		Metier	
		Transversal data-capacity	
	VMS	Ecosystem data (indicator 5, 6 and 7)	No guidelines for evaluating VMS data
Control of fisheries	Logbook and landing declaration	Geographic Stratification	One strata per day  Possible inconsistency with VMS data
		Metier	No mandatory inf. on selective devices in CR.  Differences in gear types.
		Biological data Landings Discards	Quality of discard data

		Transversal data Effort Landings	Hours fishing not recorded in CR.
	Sampling plans for sampling of vessels not subject to logbook and landing declaration requirements.	Metier	Unclear if the sampling plans will deliver the data required under the DCF.
		Biological data Landings Discards	
		Transversal data Effort Landings	
Control of recreational fisheries	Catch of stocks subject to recovery plan	Catch of listed species by region	The list of species/stocks to be collected are different under the two regulations.

### Extract from the report of EWG 12-01

#### Transversal variables

EWG discussed the option to delete data collected by CR from the future DCF, however there is no obligation in the control regulation to provide the information at the aggregation level as DCF needs. It is advisable to keep the list of the variables needed by DCF. Moreover not all fleet segments are covered by CR and MS are using different approaches to collect effort data for coastal fleets.

In addition, 36th STECF Plenary recommended that that data collected under the CR should not be included in the DCF unless it is to be expected that the quality of the data collected under the CR does not fulfil the quality requirements of the DCF. STECF further recommended including in the new DCF commitments for MS to set up at national or regional level, a system to encourage cooperation between control authorities and the NP of the DCF.

This co-operation system should address all issues of relevance for the collection and processing of data to be collected under the CR and the DCF.

RCM NS&EA in 2009 recommended considering making submission of the following Transversal Variables optional:

number of trips / hours fished for RCM Med&BS

number of rigs

number of fishing operations

number of nets/length

number of hooks/number of lines

number of pots, traps

soaking time

STECF EWG 12-01 discussed this possibility and agreed that necessity of collection of such indicators and their aggregation level should be discussed and agreed on the regional level. However core indicators, which are covered by control regulation or could be derived from control data (GT days and kW days), should be covered by future DCF.

### **Recommendations with regard to transversal variables from EWG 12-01**

1. DCF Glossary	
EWG 12-01 Recommendation :	STECF-EWG 12-01 recommends a glossary with the terms used in the DCF (Biological, transversal, ecological and ecological part of the data collection program). Clear definitions are to be given in this glossary in order to ensure a common and harmonized understanding. The glossary should be a single annex with general definition for all three sectors (fleet, aquaculture, processing). As part of this, it is also recommended to delete last two columns of the Appendixes VI, X and XII (Definition and Guidelines) of the Commission Decision in the future DCF.
Follow Up Action Needed :	Ad-hoc contract or WG. Await Review by STECF Plenary in April 2012

Responsible For Follow Up Action :	DG MARE
Time Frame	During 2012

7 Annual Work Plans – <b>Transversal data collection</b>	
EWG 12-01 Recommendation :	STECF-EWG 12-01 recommends that MS Annual Work Plans also provide a descriptions of the procedures for collecting additional information on transversal variables that cannot be derived from existing data sources.
Follow Up Action Needed :	Await review by STECF Plenary in April 2012
Responsible For Follow Up Action :	DG MARE
Time Frame	2013

8 Access to VMS and logbook data	
EWG 12-01 Recommendation :	STECF-EWG 12-01 recommends that MS scientific institutions involved in data collection have online access to VMS and logbook data, as well as data collected under the Control Regulation.
Follow Up Action Needed :	Await review by STECF Plenary in April 2012
Responsible For Follow Up Action :	DG MARE and National Correspondents
Time Frame	2012 and following

9 Transversal data – <b>Organisation of data and analysis</b>	
EWG 12-01 Recommendation :	STECF-EWG 12-01 recommends that the roles of the institutions involved in the collection and analysis of transversal data be discussed and clearly defined in a dialogue between all relevant parties, i.e. research institutes, control & enforcement agencies and fishing industry representatives. The roles

	and tasks of these parties have to be described in the relevant legislation or at least in the MS Operational Programmes.
Follow Up Action Needed :	Await review by STECF Plenary in April 2012
Responsible For Follow Up Action :	DG MARE, National Correspondents
Time Frame	2012 and following

19 Transversal data – <b>less obligatory collection</b>	
EWG 12-01 Recommendation :	EWG 12-01 endorses the recommendation from RCM NS&EA in 2009 to make submission of the following Transversal Variables optional. The need for collecting data on such indicators and their aggregation level are to be discussed and agreed on the regional level:  <b>number of trips / hours fished for RCM Med&amp;BS</b> <b>number of rigs</b> <b>number of fishing operations</b> <b>number of nets/length</b> <b>number of hooks/number of lines</b> <b>number of pots, traps</b> <b>soaking time.</b>
<b>Follow Up Action Needed :</b>	<b>Await review by STECF Plenary in April 2012</b>
<b>Responsible For Follow Up Action :</b>	<b>DG MARE</b>
<b>Time Frame</b>	<b>Before EWG on new DCF meeting in October 2012</b>

## Proposed draft text for DCMAP

### COLLECTION OF TRANSVERSAL VARIABLES

#### 1. VARIABLES

The variables required are listed in Document X (or Appendix X, this would require a revision of the DCMAP if they are changed during the period 2014-2020)

## **2. DISAGGREGATION LEVEL**

- (1) For vessels subject to logbooks the disaggregation level of the collected data is by trip
- (2) For vessels not subject to logbooks, the disaggregation level of the collected data is by métier of fishing activity or trip
- (3) For fishing activity where no vessel is involved, the disaggregation level of the collected data is by month

## **3. SAMPLING STRATEGY**

For vessels subject to logbooks the variables by trip should be supplemented with a fishing activities code. (If true, replace it by: no sampling is required because transversal data are already collected through the Control Regulation)

For fishing activities and vessels not subject to logbooks Member States shall implement a sampling programme estimating the required parameters on an annual basis. The design of the sampling plan should be in accordance with sound statistical practice.

## **4. QUALITY OF DATA**

Member States shall include in their annual report information on the quality of the data.

## **6.4 Recreational fisheries**

### **EWG12-15 comments**

Conclusion: A chapter of the provision of recreational fisheries data should be included in DCMAP.

Recreational fisheries data are needed to:

- carry out single species assessments
- assessment of the economic and social importance of the recreational fishery

There are remarkable differences in the status quo of recreational fisheries data collection between the member states. Some countries are not collecting such data at all, whereas others may have surveys on a regular basis producing estimates of catch volumes by species. Even if the recreational catch levels are not always known, it is evident that recreational catches form a large part of the total catches of some species. The ICES Working Group on Recreational Fisheries Surveys (WGRFS) is the forum for planning the methodology for marine recreational fishery data collection for stock assessment purposes.

For some internationally assessed marine stocks, data on volume and structure of recreational catches are already included in the stock assessments. For others, use of recreational fishery data in the assessments will be evaluated in the benchmark assessments in the near future. If data on recreational catches is needed in the stock assessment, it may be collected under the DCF. The decision-making process to include new species for recreational fisheries data collection needs to be dynamic and adaptive addressing the documented needs of end-users. This is achieved if the list of species for which recreational data is collected as well as the variables needed for each species should be agreed in RCGs.

To monitor the development of recreational fisheries and to conclude if recreational catches form a significant part of total removals from a stock, the volume and species composition of marine recreational fisheries should be surveyed by MS every Xth year. RCGs may coordinate timing and methods for such surveys to get a covering picture of the recreational fisheries on a region level. If the

share of the recreational catches for a reference priority list stocks is higher than x % of the total catches, MS should collect data on the volume of recreational catches. RCGs together with end-user decide if sampling resources should be allocated to collect other data such as biological variables from recreational fisheries catches.

Control Regulation ((EC) 1224/2009) obligates member states to monitor recreational catches of stocks subject to recovery plans when recreational fishing is practiced from vessels engaged in recreational fisheries. Fishing from the shore is not included. According to ((EU) 404/2011) data should be collected biennially. National scientific institutes should have access to this data and only data additional to the provisions of the Control Regulation should be collected.

The recreational catches should include only removals from the stock, not catch-and-release activities.

## Additional information (from RCM-NA 2012)

### Recreational fisheries under the DCMAP

Recreational fishing is an important leisure activity within Europe and pursued by more than 30 million anglers. For certain marine stocks recreational fishing pressure is comparable to – or even exceeds that of – the commercial fishery. Inclusion of recreational fishing mortality (presently unrecognized) to reduce assessment uncertainties may be crucial for improved management for some stocks. Importantly, recreational fisheries must be incorporated into the new DCMAP.

The collection of recreational fishing data is still a new phenomenon in many MS and there is no clear framework for application of the data for stock assessment or fishery management. The ICES Working Group on Recreational Fisheries Surveys (WGRFS) is the forum for planning and co-ordination of marine recreational fishery data collection for stock assessment purposes. A key objective for WGRFS is to supply recreational fishery data and estimates into the ICES stock assessment and advisory process and responding to the requirements of the EU Data Collection Framework (DCF) and other end users. For the first time, data on recreational removals for Baltic cod and European sea bass will be included in the benchmark assessments for these stocks later in 2012. During the two benchmarks assessment, members of WGRFS will participate and based upon this experience, a framework for including recreational catches in the assessment will be developed.

As for commercial fisheries sampling, WGRFS considers that requirements to collect recreational fishery data should be based on agreement reached at a regional scale on end-user needs for recreational fishery. The decision-making process to include new species for data collection needs to be dynamic and adaptive addressing the documented needs of end-users. This approach is in line with the end-user negotiation paragraph in the Oostende Declaration.

There must be a mechanism allowing derogations for sampling recreational fisheries of species whose catches are below an agreed threshold (how to define this threshold?). The derogations should be well documented and based in robust estimates (pilot studies). A follow up strategy should be developed inside the new DCMAP to keep track of the development of these fisheries (i.e. updated documentation supporting the derogation should be mandatory every X years).

The type of data collected (catches estimates, biological information) and their periodicity should be agreed with end users, considering scientific needs, sampling logistic constraints and cost-effectiveness criteria. It must be taken into account that sampling of recreational fisheries is a new activity for many MS and that sampling surveys involve high costs, especially for certain data such as size distributions. When necessary, new cost-effective sampling methods can be tested by means of pilot studies.

It is important that requirements for recreational fishery data collection in the new DCMAP recognizes the national peculiarities of recreational fisheries, and that the new DCMAP supports collaboration



between countries within regions to ensure national datasets are collected in a way that they can be combined in a statistically valid way at a stock level and that the quality of the datasets can be compared objectively using guidelines established through WGRFS. The potential for task sharing to make best use of DCMAP funds should also be encouraged.

Also from an economic and social point of view, some recreational fisheries are important and maybe have to be assessed.

## Extracts from the report of EWG 11-02

Comments from ToR 7.....

(19) EWG 11-02 considered the increasing interest in recreational fisheries and their impact on conservation policies. The future DCF could include the assessment of the economic and social importance of recreational fisheries. However, considering the complexity of this sector and the methodological challenges in valuing recreational activities, the group suggested an investigation into the feasibility of collecting economic data on recreational fisheries.

## 8.4 Principles of the DCR/DCF: STECF comments on SGRN 06-03 report

With respect to data needs, STECF commented that the following should apply to a revised DCR:

Obtain reliable estimates of total removals from fish and shellfish stocks, incl. recreational and part-time fisheries.

## 14.4 Sampling of recreational fisheries

Both the CR and the DCF have commitments for Member States to collect information on catches by recreational fisheries. However, the list of stocks/species to be collected is different in the two regulations. Under the CR Member States are obliged to collect information on stocks subject to recovery plans. This means that the stocks to be sampled under the CR may change over time. The obligations under the DCF are given in form of a list of species to be sampled by region. The species may not necessarily be subject to a recovery plan and separate sampling under the DCF may be required to fulfill the commitments.

## Extract from the report of EWG 12-01

Recreational fisheries: As for transversal data, only those data additional to the provisions of the Control Regulation have to be collected. The specifications for recreational fisheries data needs should be defined by the relevant end-users. If used in stock assessments, the required species/stocks, spatial, temporal and technical (gear types etc.) resolution should be defined.

## Proposed draft text for DC-MAP

## **Collection of recreational fisheries data**

Member states shall carry out surveys every Xth year to estimate the share of recreational fisheries catches in the total catches of stocks on the reference priority list if no other information to estimate this share is available.

For such stocks on the reference priority list, where data on recreational fisheries removals is needed for stock assessment purposes or where recreational removals are higher than x % of the total catches, Member States shall estimate the weight of the recreational catches. For salmon and eel, data collection covers the recreational fisheries in both marine and fresh waters.

Depending on the needs of stock assessment methods used for the stock, Member States shall collect biological variables from recreational fisheries removals. Need for such sampling, countries responsible for it, variables to be collected and aggregation levels are decided in the Regional Coordination Groups. Member states describe the methods in their Annual Plans and report the achievements in their Annual Reports.

## **6.5 Salmon and eel data**

### **EWG12-15 comments**

Conclusion: Salmon and eel data for the stock assessment purposes should be collected under DCF.

Salmon and eel data are needed to:

- carry out single species assessments for these species
- assessment of the economic and social importance of the salmon and eel fisheries (recreational and commercial)

Changes to the EU Data Collection Framework (DCF) in 2007 introduced requirements to collect data on eel and salmon, but the specific data requested for these species did not meet the needs of national and international assessments. The ICES Workshop on Salmon and Eel DCF Data (WKSEDCF) was organized in 2012 to

- Determine the data required to support international obligations for the assessment of eel and salmon;
- Describe the national monitoring and survey programmes required to meet these data requirements; and
- Consider options for integrating salmon and eel surveys and monitoring.

WKESDCF described the current data collection requirements relating to diadromous species and concerns related to those, Eel and salmon differ markedly from marine species in their biology, the nature and distribution of their fisheries, and the methods used to assess stock status and provide management advice. As a result, the data collection requirements do not fit well into the 'standard' approaches used for marine species. WKESDCF described the data needs of the salmon and eel assessments and gave several recommendations on which type of data and how should be collected for salmon and eel.

As a whole, WKESDCF concluded that the current DCF covers most of the data needs required for the salmon stock assessment in the Baltic, whereas in the case of Atlantic salmon and eel the current DCF does not cover the collection of data needed for the assessment.

The WKESDCF made a thorough revision of the current DCF and listed several recommendations to be taken into account in the new DCMAP. General recommendations given by the group are listed below. Several specific recommendations concerning data collection for eel and salmon were also made and can be found in the WKESDCF report. However, it was considered that they are too detailed to be included in the DCMAP as there is a general agreement that the new DCMAP should be flexible and restrict the details as much as possible in order to allow the data collection to accommodate efficiently to changes the end-user needs.

## General recommendations of the WKESDCF 2012

- The revised DCF Regulation should cover the collection of data on all recreational and commercial eel and salmon fisheries regardless of how they are undertaken; however it should be noted that the distinction between recreational and commercial fisheries is not always clear, and it may be difficult to define precise métier because of the varied and specialised methods used to exploit these species (Section 2.2.2);
- Economic data should be collected for both salmon and eel fisheries (however the Workshop did not address this topic in any detail) (Section 2.2.2);
- For clarity, eel and salmon should be dealt with in separate subsections to marine species in the new DC-MAP (Section 2.3), the data elements for Baltic and Atlantic salmon should also be separately specified under the new DC-MAP, and these requirements for eel and salmon should be integrated with those relating to the WFD, MSFD and HD (Section 4.1.3);
- There will need to be some flexibility in the requirements for data collection on eel and salmon, but ICES should be given the role of confirming that proposed data are appropriate and/or required [see other recommendations] (Section 2.3);
- Sampling of diadromous species within national programmes should endeavor to meet the standards of precision required for marine species, and where this is impractical it should be addressed within the usual derogation procedures or pilot studies (Section 5);
- An international pilot study (appropriate under 93/2010, Ch. II Section B, Para. 1) would be a fruitful way forward: to establish minimum standards for data collection on the basis of current expert judgment; to analyse achieved precision levels where adequate databases exist; and to stimulate further analysis when and where more data become available within the framework of the DC-MAP. Separate pilot studies might be required for eels and salmon, but a joint study should be considered (Section 5);
- Habitat data collection should be included under the new DC-MAP, and this should be harmonized with the requirements to collect data on habitat under Article 17 of the Habitats Directive (Section 6);
- Member States should seek opportunities to harmonize data collection programmes for eels and salmon, particularly in relation to electrofishing surveys, trapping facilities, automatic counters and habitat surveys (Section 6).

EWG12-15 agrees that DC-MAP should include provisions for collecting such eel and salmon data, which is needed for stock assessment purposes. However, the details of sampling, such as the variables to be sampled, number and distribution of samples and targets for the quality of data will be decided in the regional level. Regional planning, coordination and task sharing between Member States should ensure as effective use of resources as possible. It is important, that salmon and eel data needs are evaluated and prioritized together with other regional data needs. As it comes to eel, there is a need for cooperation between RCGs, since there is only one pan-European eel stock and a high variety of local conditions that should be also taken into account

Proposed draft text for DCMAP  
(to be included under chapter “stock-based variables”)

....For salmon and eel, data for assessment purposes shall be collected from inland waters. The rivers where such data is collected as well as variables which are to be collected in each of the rivers are decided in Regional Coordination Groups.

.....Where relevant, additional biological sampling programmes of the unsorted landings have to be carried out in order to estimate:

- (a) the share of the various stocks in these landings for Herring in the Skagerrak IIIA-N, Kattegat IIIa-S, and Eastern North Sea separately and salmon in the Baltic Sea;
- (b) the share of the various species for those groups of species that are internationally assessed, e.g. Megrim, Anglerfishes and elasmobranchs.

## 6.6 Regional databases

Regional coordination as well as distribution of data builds upon the availability of data in centralized database systems. Regional databases (RDBs) of various kinds are either already established or will be established in the near future. These databases should facilitate RCG work, provide a standardized platform for data exchange to end-users as well as facilitate the quality assessment of data. In the mid-term, RDBs will be developed to support the end-users’ needs for data processing.

Following the recommendation by STECF EWG 12-01 that “*regional databases are considered in a revision of the present DCF and that efforts are made by the Commission to facilitate the use of RDBs where Regional Coordination Meetings find it appropriate*”, STECF EWG 12-15 proposes to give RDBs a central place in DCMAP by adding the obligation for MS to deliver scientific data for scientific analysis to RDBs under management of the RCMs.

The data upload into RDBs shall be included in the MS’ Annual Workplan, including a time path and be reported upon in the Annual Report. The upload performance as described in the Annual Report can be included as a performance metric for the MS’ compliance to DCMAP obligations. This upload should encompass biological, transversal as well economic data where applicable. The variables to be uploaded as well as the exchange format to be used shall be defined in the Master Reference Register.

Confidentiality of the data content shall be guaranteed by delivering detailed data as defined in the current Council Regulation 199/2008 (Art 2g): ‘*detailed data*’ means data based on primary data in a form which does not allow natural persons or legal entities to be identified directly or indirectly;

As suggested by STECF EWG 12-01, DCMAP should facilitate funds for governing, developing and managing RDBs in the various regions. RCMs in cooperation with PGECON shall strive to minimize

duplicate work by limiting the number of databases and cooperate where possible to store data as efficient as possible.

***Text proposal:***

**Management of national primary and metadata**

The national computerised databases referred to in Article 13 of Regulation (EC) No 199/2008 shall allow cost efficient exchange of data and information within Member States between involved institutes.

**Data transmission**

Managing fisheries resources requires the processing of detailed data in order to address specific issues. In that context, Member States should transmit scientific data needed for scientific analysis into a Regional Database that falls under governance of Regional Coordinating bodies and should ensure they have the technical capacity of doing so. If necessary, the detailed data may be aggregated before their transmission, to the level of aggregation stipulated in the request as defined by the end-users.

Member States shall transmit the biological data mentioned in article XX to the relevant regional database by DAY-MONTH of each year, having in mind that in some cases only provisional data are available for early meeting working groups.

Member States shall transmit transversal and economic data mentioned in article XX to the relevant regional database by DAY-MONTH of each year.

Member State shall specify the planned transmission of data, including the level of detail and temporal and spatial information, into the Regional Database in its Annual Workplan.

**6.7 Sub-Group: Identification of New and Redundant Economic and Social Parameters**

**Background**

Economic variables for the DCF are set out in the annexes of Commission Decision 2008/949/EC<sup>1</sup>. The relevance of these and additional social data variables needed to be re-evaluated for inclusion in the new DCMAP. It is also proposed that under the new DCMAP, economic data collection for aquaculture will be expanded to include the freshwater aquaculture sector and in particular the costs of data collection compared with benefits of having this information available. The question of the framework for data collection and whether additional flexibility in the DCMAP was needed was also considered.

**General aspects**

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<sup>1</sup> COMMISSION DECISION of 6 November 2008 adopting a multiannual Community programme pursuant to Council Regulation (EC) No 199/2008 establishing a Community framework for the collection, management and use of data in the fisheries sector and support for scientific advice regarding the common fisheries policy.

The group recognised that had been and would be a number of more detailed discussions on economic data in addition to those referenced through the STECF EWG 11-18 (see sub-group report at Annex I). It was acknowledged that there was a limit to the detail in recommendations that could be made.

Discussions were based on a number of working assumptions as follows:

- That the variables currently listed were broadly fit for purpose and would mostly remain unchanged;
- That significant expansion of the scope and range of DCF data collection should be avoided;
- Additional variables should be supported by a strong justification and clear business case;
- That statistical and administrative data, where already existing, should be used where quality and aggregation level was of the required standard.
- Should use existing standards & definitions where possible for processing data.

With respect to use of existing information the group considered that there were a wide range of existing data collections through the EC Eurostat, DG MARE and the EUMOFAP and National Statistical Institutes (NSIs) which might be used to augment or partly replace DCF data collection. In some cases the aggregation level of the collected data was likely to be too high to be of direct use. The group felt strongly that Eurostat should be consulted in particular over what data they held and how this might be adapted to support the revised CFP. Input of Eurostat was also considered valuable with respect to developing and applying methodologies and metadata. In addition to the question of whether the DCF was always the correct medium for collection of these variables the question of flexibility was also raised.

#### Recommendation

Dialogue with Eurostat is needed on how far they and NSIs can assist with meeting the requirements of the new DCMAP, either through provision of existing information; adapting existing data collections and provision of advice on methodologies and data standards

### **Economic Data – General (Fleet, Processing Industry and Aquaculture)**

The existing variables were evaluated and comments on these are provided in Annex II. In looking at economic variables an attempt was made to respect consistency in parameters between fleet, processing industry and aquaculture. Whilst accepting that the majority of existing economic variables were necessary, the need to tighten definitions in some cases was recognised and that this work was being addressed out by other groups. For example it appears that the current DCF definition of direct income subsidies is contradictory and needs to be better explained, not only to clarify exactly what should and shouldn't be classed as a direct income subsidy but also perhaps to provide a more detailed breakdown. The group believed that the greater degree of flexibility being considered for biological information collection was less important for economic data where having clear lists of set variables was considered to be appropriate. This view did not preclude the inclusion of relevant concepts, code lists and definitions within the Commission's 'Master Data Register'. There was a general concern that this could allow an increase in the scope of data collection if not correctly regulated. The additional flexibility possible, for example in terms of periodicity of collection for example, was welcome.

### **Freshwater Aquaculture – Economic Data**

The need for expanding data collection for aquaculture to cover freshwater production is proposed to inform construction of national operational programmes that MSs would be obliged to produce under the EMFF. This would link to payment of grant aid to this sector under the EMFF.

Freshwater aquaculture comprises a significant proportion (around a quarter) of overall aquaculture production across the EU but this varies widely across the European Union. Information on the structure of the sector including recommendations on the ease of data collection for both marine and freshwater aquaculture were presented in the report of May 2009 ‘Definition of Data Collection Needs for Aquaculture – Part 1 Results of Costs and Earnings Survey’<sup>2</sup>. This noted a number of issues with data collection (paraphrased below) whilst suggesting that regular data collection was still feasible:

- Freshwater fish farming (trout, carp) as well as some segments of saltwater aquaculture (oysters) were characterised by large numbers of small producers, many of whom did not maintain detailed accounting records which would allow an easy overview of costs and balance sheet indicators. Compilation of the data from these firms was labour intensive and costly.
- The EU saltwater fish farming (seabass, seabream and salmon) was in relatively few large companies. Obtaining access to their accounts, beyond publicly accessible annual reports, was difficult.
- Confidentiality was a big concern for emerging activities which were carried out by very few companies
- The economic performance of large and small firms could be very different and needed to be separated for comparability. However, this caused confidentiality problems where few companies were dominant in the market.

The group believed that the difficulties inherent in data collection had not altered significantly since this report.

Aquaculture was considered to be closer to agriculture in nature and it was suggested that collecting the data through the DCMAP but in a way similar to the Farm Accountancy Data Network (FADN) should be explored. This had also been suggested in the 2009 report. Use of FADN would have the advantage that it made use of an existing collection structure. Additionally, a threshold for data collection is applied so to ensure that coverage of 90 percent of standard output (by value) is obtained. It was thought that this would go some way to addressing concerns of a disproportionate data collection burden through the surveying of a large number of very small enterprises. The need for data collection in each Member State should be determined by its relative importance with the possibility of data not being supplied where this is low. It was considered that any data collection should be limited to commercial production only.

The group identified an issue with mismatch between DCF variables and those required for the Aquaculture Statistics Regulation (EC) No. 762/2008. There was overlap between these, despite the latter not including any economic variables other than value of sales per species. It is suggested that the Commission should review their whole needs for aquaculture data and amend collection following this, starting by augmentation of Regulation 762/2008 and aligning data collection wherever possible. It is also suggested that the Coordinating Working Party for Fisheries Statistics (CWP) Handbook and Regulation (EC) No. 762/2008) should provide the basis for aquaculture data standards and definitions.

#### Recommendations

Lists of variables in Annexes are still considered to be appropriate for economic variables. Any additional flexibility should be managed through PGECON.

Collection of economic data on freshwater aquaculture through FADN should be explored.

If collection of economic information on the freshwater aquaculture sector is introduced there should be an option for Member States to be exempted from supplying data where the difficulty and costs of

<sup>2</sup> Reference No. FISH/2006/15 - Lot 6

supplying these is high in relation to the significance of the industry in that country. The production thresholds applied through FADN might be a useful way to do this.

The Commission should review their aquaculture data requirements and Regulations to ensure coherence between data collections.

Data standards for aquaculture should follow those of the CWP handbook and Regulation (EC) No. 762/2006.

## **Social data**

It was considered that there was a need to clearly distinguish between economic data and social data to be used for socio-economic studies and data that have dual use.

The document presented by the Commission (Frangoudes 2012) provides a starting point for discussions on social variables/indicators.

The group recognised the need for social data for long term management plans and for the assessment of the impact of management measures introduced through the new CFP. However they agreed that more information on the precise uses of the data and also justification on their inclusion under the DCMAP would have been needed to give a scientifically based advice on this issue. The group made some suggestions for possible variables but agreed that further investigation is needed to better identify what should be collected and what is the best way to do this (e.g. through ad-hoc studies or regular data collection etc.). It was also agreed that there should be investigation into what data are already be collected through National Statistical Institutes or administrative bodies.

It was thought likely that social information would not be of equal interest to all regions or fisheries. It was also thought to be extremely difficult to anticipate the questions that social researchers might wish to ask in the future so that the requirements could be clearly defined under the DCMAP. However it was thought that the DCMAP might still provide a framework to enable collection of these data on an ad-hoc basis, perhaps under the governance of regional groups. Participation of end users in these discussions was considered to be essential.

There were some concerns over how the data link to other parts of the DCF. The basic unit for social information is considered to be the individual/family unit/family enterprise while the economic information refers to vessel, enterprise, fleet segment, production unit/holding. Whilst in some cases the information will be the same between these units, this is not always so, particularly for larger vessels or enterprises.

## **Recommendations**

The group cannot recommend the inclusion or exclusion of social data into the new DCF, due to lack of information about the needs of the Commission regarding these kinds of data. However, if social variables are to be introduced, we recommend they should be included into the current economic variables (see table Annex II) on the presumption that they will not further burden the MS (e.g., if MS is already collecting data through a survey).

MS should be able to apply for an exemption of the collection of social variables in case of disproportionately high costs.

Existing data collections and ad-hoc studies should be explored as means to supply the required information.



## **ANNEX I STECF EWG 11-18 ECONOMIC VARIABLES**

STECF EWG 11-18 recommended compiling the glossary of definitions of economic variables which should be available for the revision of the DCF. The group proposed that only one annex with general definition for all three sectors (fleet, aquaculture, processing) should be included in the future DCF. This will ensure that definitions across the three modules are the same for common variables. STECF EWG 12-01 discussed the importance of glossary for the future DCF and Recommends to the Commission to compile the glossary as soon as possible. It is also recommended to delete last two 46 columns of the Appendixes VI, X and XII (Definition and Guidelines) of the Commission Decision in the future DCF as glossary would be part of DCF.

Addition important revisions of variables could come from the compilation of the glossary that will improve some definitions of the current economic DCF variables. All footnotes in the Appendixes with the economic variables should be reviewed and harmonized with the provisions of the proposed glossary.

The Group discussed if there is a need to expand subsidies data collection, defining subsidies in more precise way and including subsidies for investment (horizontal for fleet, aquaculture and processing sectors) as well as necessity to collect data on indirect subsidies as fuel subsidies for fleet in the future, as it could have a crucial importance for the cost structure. Group agreed, that the information regarding the investment and cessation subsidies paid per enterprise/vessel is publically available through the administrative data sources, however there is no information to which fleets or aquaculture segments it is targeted. The EWG 12-01 agreed that there is a need to improve definition of subsidies however the necessity of additional indicators should be decided by the end users.

The EWG discussed the possibility to add some new socio-economic variables as age structure of employees and gender distribution. Due to stability of this kind of data it is considered to collect it few times per programming period (e.g. second and fifths year of data collection). The age structure is considered as very important for fishery, while gender is more important for aquaculture and fish processing where women are more involved in the production.

Due to new regional approach in fisheries management and possible necessity to analyse spatial distribution of fishery, aquaculture and fish processing it is recommended to evaluate possibility to report data on spatial distribution of some socio-economic indicators (e.g. employment, value added, number of vessels/enterprises, value of production, etc). This should not lead to the collection of additional information and could be done few times during programming period as there is no need to do it annually. The necessity of this kind of data presentation and administrative disaggregation level (NUTS 2 of NUTS 3) should be assessed and justified on the regional level depending on the needs of end users.

EWG pointed out, that market information is missing under the current DCF. There were projects funded by the Commission with the purpose to establish the market observatory in the fishery sector, however the results are not available for the public yet. May be DCF should consider results of the market observatory programme in the future.

## ANNEX II DCF ECONOMIC AND SOCIAL VARIABLES (PROPOSALS FOR CHANGES AND AMENDMENTS ARE BOLD AND IN ITALICS)

Please put in the existing and proposed variables/variable group and some description if necessary. Please, also describe the rationale for **each** variable. Finally please indicate by A=absolutely necessary, lack would cause serious problems for aims of CFP, B=lack of variable has more disadvantages than advantages and C=variable would be nice to have, but costs and other burdens would exceed benefits. If you propose a new variable, please make this visible, e.g. by underlining.

### Fleet

Variable Group	Variable	Description	Rationale/Cost/Benefits	Assessment A/B/C	End-User
Income	Gross value of landings		Assessment of economic performance (Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series. Used for bio-economic modeling	A	EC; STECF; Fisheries scientists;
Income	Income from leasing out quota or other fishing rights		Assessment of economic performance (Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
Income	Direct subsidies		Assessment of economic performance (Operating Cash Flow; Profit/loss) [PGECON 2012 – Page 15]	A	EC; STECF; Fisheries scientists;
Income	<u>Indirect subsidies</u>	E.g., fuel subsidies	It can have crucial importance for the cost structure. [STECF 12-07 – page 46]	C	EC; STECF; Fisheries scientists
Income	Other income		Assessment of economic performance (Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;

Personnel costs	Wages and salaries of crew		Assessment of economic performance(Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series. Used for bio-economic modeling.	A	EC; STECF; Fisheries scientists;
	Imputed value of unpaid labour		Assessment of economic performance(Profit/loss); Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
Energy costs	Energy costs		Assessment of economic performance(Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series. Important cost for bio-economic modeling.	A	EC; STECF; Fisheries scientists;
Repair and maintenance costs	Repair and maintenance costs		Assessment of economic performance(Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series. Important for bio-economic modeling.	A	EC; STECF; Fisheries scientists;
Other operational costs	Variable costs		Assessment of economic performance (Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series. Important for bio-economic modeling.	A	EC; STECF; Fisheries scientists;
Other operational costs	Non-variable costs		Assessment of economic performance (Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series. Important for bio-economic modeling.	A	EC; STECF; Fisheries scientists;
Other operational costs	Lease/rental payments for quota or other fishing rights		Assessment of economic performance (Gross Value Added Operating Cash Flow; Profit/loss); Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;

Capital costs	<u><b>Annual depreciation</b></u>	To delete	Replaced by “Depreciation costs” and “Interest costs”. [STECF 12-07 - page 47]		
Capital costs	<u>Depreciation costs</u>		Assessment of economic performance (Profit/loss); Impact assessment of management measures;	A	EC; STECF; Fisheries scientists;
Capital costs	<u>Interest costs</u>		Assessment of economic performance (Profit/loss); Impact assessment of management measures;	A	EC; STECF; Fisheries scientists;
Capital value	<u><b>Value of physical capital; depreciated replacement value</b></u>	To delete	Replaced by “Value of physical capital; current value”. Not clearly understandable [EWG 11-18]	A	EC; STECF; Fisheries scientists;
Capital value	<u>Value of physical capital; current value</u>	New – replacing the previous	Replacing “Value of physical capital; depreciated replacement value”. Assessment of economic performance and capacity dynamics; Necessary for 'capital costs' and 'return on capital' calculations;	A	EC; STECF; Fisheries scientists;
Capital value	Value of physical capital; depreciated historical value	Deleted	Not needed. Can be calculated from other variables	A	EC; STECF; Fisheries scientists;
Capital value	Value of quota and other fishing rights		Assessment of economic performance and the total value of capital (tangible and non tangible); Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
Investments	Investments in physical capital		Assessment of economic performance (ROI) and capacity dynamics; Impact assessment of management measures; Needed to maintain time series/ It's very difficult to assess the quality of this information, because it's highly variable from vessel to vessel.	A	EC; STECF; Fisheries scientists;
Financial position	<u><b>Debt/asset ratio</b></u>	To delete	To be replaced by ”Debt” and “Total assets”,		

			[STECF 12-07 - page 47]		
Financial position	<u>Debt</u>		Assessment of economic performance and understanding of fisheries dynamics; Impact assessment of management measures. It's very difficult to assess the quality of this information, because it's highly variable from vessel to vessel. Difficult to collect specially from small scale fisheries.	A-	EC; STECF; Fisheries scientists;
Financial position	<u>Total assets</u>	Tangible and intangible	Assessment of economic performance (ROI) and capacity dynamics ; Impact assessment of management measures.  It's very difficult to assess the quality of this information, because it's highly variable from vessel to vessel. Difficult to collect specially from small scale fisheries.	A-	EC; STECF; Fisheries scientists;
Employment	Engaged crew	<b><i>Total in number</i></b>	Assessment of economic performance and fishing productivity; Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
Employment	<u>Engaged crew</u>	<b><i>By gender*</i></b>	Indicator of opportunities in sector along gender lines; necessary for impact assessments and LTMPs Gender particularly relevant for small scale fisheries	A	EC; STECF; Fisheries scientists;
Employment	<u>Engaged crew</u>	<b><i>By age* (Three categories, to be defined and consistent with EUROSTAT methodology)</i></b>	Demographic data indicating attractiveness of sector to new/young; necessary for impact assessments and LTMPs	A	EC; STECF; Fisheries scientists;
Employment	<u>Engaged crew</u>	<b><i>By region*. Three categories suggested:</i></b>  <input type="checkbox"/> <b><i>National;</i></b>  <input type="checkbox"/> <b><i>EU national</i></b>	Indicates place of origin which shows migration patterns; necessary for impact assessments and LTMPs	C	EC; STECF; Fisheries scientists;

		<input type="checkbox"/> <i>Non EU</i>			
Employment	<u>Engaged crew</u>	<b>By employment status:</b> <input type="checkbox"/> <i>Full time/part time</i>	Indicator of dependence of individuals on the sector; necessary for impact assessments and LTMPs	B	EC; STECF; Fisheries scientists;
Employment	<u>Engaged crew</u>	<b>By education level*:</b> <input type="checkbox"/> <i>Primary</i> <input type="checkbox"/> <i>Secondary</i> <input type="checkbox"/> <i>Upper</i> <i>(List can be changed to comply with international standards, eg. ISCED)</i>	Indicator of commitment to industry/possibilities of employment elsewhere/dependence on sector; necessary for impact assessments and LTMPs	B	EU, Regional, MS, local (e.g. FLAG applications
Employment	<u>Number of unpaid labour</u>	<b>Number of unpaid laborers used to calculate the “imputed value of unpaid labor” variable</b>	Necessary for imputed value of non paid labour calculation and for impact assessments and LTMPs	B	EU, Regional, MS, local (e.g. FLAG applications
Employment	FTE National		Assessment of economic performance and fishing productivity; Impact assessment of management measures; Needed to maintain time series	B	EC; STECF; Fisheries scientists;
Employment	FTE harmonized		Assessment of economic performance and european comparison; Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
<b>Fleet</b>	<b>Number</b>		<b>Delete from appendix 6 as they are also on appendix 8 and they are transversal variables</b>		
<b>Fleet</b>	<b>Number of vessels</b>	<b>Should be added to transversal</b>	<b>Necessary for spatial analysis of fisheries and</b>		

	<i>per region (NUTS 2)</i>	<i>variables</i>	<i>regional dependencies.</i>		
<i>Fleet</i>	<i>Main LOA</i>		<i>Delete from appendix 6 as they are also on appendix 8 and they are transversal variables</i>		
<i>Fleet</i>	<i>Mean vessel tonnage</i>		<i>Delete from appendix 6 as they are also on appendix 8 and they are transversal variables</i>		
<i>Fleet</i>	<i>Mean vessel's power</i>		<i>Delete from appendix 6 as they are also on appendix 8 and they are transversal variables</i>		
<i>Fleet</i>	<i>Mean age</i>		<i>Delete from appendix 6 as they are also on appendix 8 and they are transversal variables</i>		
<i>Effort</i>	<i>Days at sea</i>		<i>Delete from appendix 6 as they are also on appendix 8 and they are transversal variables</i>		
Energy costs	Energy consumption		Assessment of economic performance and energy productivity; Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
Number of fishing enterprises/units	Number of fishing enterprises/units		Assessment of economic performance and sector concentration; Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
Production value per species	Value of landings per species		Assessment of economic performance and fish dependencies; Impact assessment of management measures; Needed to maintain time series	A	EC; STECF; Fisheries scientists;

\* Social data may not be collected every year

NB: The methodology for calculation of GVA, OFC, Profit/loss is based on the AER (STECF 12-10)

## Aquaculture

Variable Group	Variable	Description	Rationale/Cost/Benefits	Assessment A/B/C	End-User
Income	Turnover	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series needed to calculate GVA, EBIT, running cost to turnover ratio, EBIT to turnover ratio	A	EC; STECF; Fisheries scientists; Others
Income	Subsidies	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series, GVA and EBIT	A	EC; STECF; Fisheries scientists; Others
Income	Other income	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series, GVA and EBIT	A	EC; STECF; Fisheries scientists; Others
Personnel costs	Wages and salaries	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series, for EBIT and running cost to turnover ratio	A	EC; STECF; Fisheries scientists; Others
Personnel costs	Imputed value of unpaid labour	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series, for EBIT	A	EC; STECF; Fisheries scientists; Others
Energy costs	Energy Costs	<i>Per species and technique. The technique used should be the same as used by Eurostat,</i>	Assessment of economic performance; Needed to maintain time series, for GVA, EBIT & ROI	A	EC; STECF; Fisheries scientists;



		<b>Regulation EC 762/2008, Annex II</b>			Others
Raw material costs	Livestock costs	<b><i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></b>	Assessment of economic performance; Needed to maintain time series, for GVA, EBIT & ROI	A	EC; STECF; Fisheries scientists; Others
Raw material costs	Feed costs	<b><i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></b>	Assessment of economic performance; Needed to maintain time series, for GVA, EBIT & ROI	A	EC; STECF; Fisheries scientists; Others
Repair and maintenance costs	Repair and maintenance costs	<b><i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></b>	Assessment of economic performance; Needed to maintain time series, for GVA, EBIT, ROI & running cost to turnover ratio.	A	EC; STECF; Fisheries scientists; Others
Other operational costs	Other operational costs	<b><i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></b>	performance; Needed to maintain time series, for EBIT & ROI		EC; STECF; Fisheries scientists; Others
Capital costs	Depreciation of capital	<b><i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></b>	Assessment of economic performance; Needed to maintain time series and for EBIT and ROI. For some segments it's very difficult to obtain this variable. Recommendation from EWG 12-13 is that issue should be treated on the Aquaculture workshop, to be held in Lisbon from 5 <sup>th</sup> to 8 <sup>th</sup> November 2012.	B	EC; STECF; Fisheries scientists; Others
Capital costs	Financial costs, net	<b><i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></b>	Assessment of economic performance; Needed to maintain time series. For some segments it's very difficult to obtain this variable. Recommendation from EWG 12-13 is that issue should be	B	EC; STECF; Fisheries scientists; Others

			treated on the Aquaculture workshop, to be held in Lisbon from 5 <sup>th</sup> to 8 <sup>th</sup> November 2012.		
Extraordinary costs, net	Extraordinary costs, net	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series. STECF 12-07 questions if this variable should be collected. For some segments it's very difficult to obtain this variable. Recommendation from EWG 12-13 is that issue should be treated on the Aquaculture workshop, to be held in Lisbon from 5 <sup>th</sup> to 8 <sup>th</sup> November 2012.	B	EC; STECF; Fisheries scientists; Others
Capital value	Total value of assets	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series and for ROI. For some segments it's very difficult to obtain this variable. Recommendation from EWG 12-13 is that issue should be treated on the Aquaculture workshop, to be held in Lisbon from 5 <sup>th</sup> to 8 <sup>th</sup> November 2012.	B	EC; STECF; Fisheries scientists; Others
Investments	Net investment	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series and Future Expectations of the Industry indicator (FEI). For some segments it's very difficult to obtain this variable. Recommendation from EWG 12-13 is that issue should be treated on the Aquaculture workshop, to be held in Lisbon from 5 <sup>th</sup> to 8 <sup>th</sup> November 2012.	B	EC; STECF; Fisheries scientists; Others
Debt	Debt	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series. For some segments it's very difficult to obtain this variable. Recommendation from EWG 12-13 is that issue should be treated on the Aquaculture workshop, to be held in Lisbon from 5 <sup>th</sup> to 8 <sup>th</sup> November 2012.	B	EC; STECF; Fisheries scientists; Others

			November 2012.		
Raw material volume	Livestock	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series	A	EC; STECF; Fisheries scientists; Others
Raw material volume	Fish feed	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series	A	EC; STECF; Fisheries scientists; Others
Volume of sales	Volume of sales	<i>Per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series	A	EC; STECF; Fisheries scientists; Others
Employment	Number of persons employed	<i>By gender and per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series	A	EC; STECF; Fisheries scientists; Others
Employment	<u>Number of persons employed</u>	<i>By age* (Three categories, to be defined and consistent with EUROSTAT methodology) and per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Demographic data indicating attractiveness of sector to new/young; necessary for impact assessments and LTMPs	A	EC; STECF; Fisheries scientists;
Employment	<u>Number of persons employed</u>	<i>By region*. Three categories suggested:</i> - <i>National;</i> - <i>EU national</i> - <i>Non EU</i>	Indicates place of origin which shows migration patterns; necessary for impact assessments and LTMPs	C	EC; STECF; Fisheries scientists; Others

		<i>and per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>			
Employment	<u>Number of persons employed</u>	<i>By employment status:</i> - <i>Full time</i> - <i>Part time</i>  <i>and per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Indicator of dependence of individuals on the sector; necessary for impact assessments and LTMPs	B	EC; STECF; Fisheries scientists; Others
Employment	<u>Number of persons employed</u>	<i>By education level*:</i> - <i>Primary</i> - <i>Secondary</i> - <i>Upper</i>  <i>(List can be changed to comply with international standards, eg. ISCED)</i>  <i>and per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Indicator of commitment to industry/possibilities of employment elsewhere/dependence on sector; necessary for impact assessments and LTMPs	B	EU, Regional, MS, local (e.g. FLAG applications
Employment	<u>Number of unpaid labour</u>	<i>Number of unpaid laborers used to calculate the “imputed value of unpaid labor” variable per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Necessary for impact assessments and LTMPs	B	EU, Regional, MS, local (e.g. FLAG applications
Employment	FTE National	<del><i>By gender and by species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i></del>	Assessment of economic performance; Needed to maintain time series	A	EC; STECF; Fisheries scientists;
		<i>Eurostat, Regulation EC</i>			

		<i>762/2008, Annex II</i>			Others
Number of enterprises	Number of enterprises	<i>By size category where the number of persons employed is:</i> 1. $\leq 5$ 2. 6-10 3. $> 10$  <i>and per species and technique. The technique used should be the same as used by Eurostat, Regulation EC 762/2008, Annex II</i>	Assessment of economic performance; Needed to maintain time series	A	EC; STECF; Fisheries scientists; Others

\* Social data may not be collected every year

NB: The methodology for calculation of GVA, OFC, Profit/loss is based on the Economic Performance of the EU Aquaculture report (STECF OWP 12-03)

### **Fish processing**

Variable Group	Variable	Description	Rationale/Cost/Benefits	Assessment A/B/C	End-User
Income	Turnover		Part of SBS, used for calculation of Net profit, Gross value added, Return on Investment, EBIT, Operating cash flow, Running Cost to Turnover Ratio, Turnover per FTE, Net Profit per FTE	A	EU Report on Processing sector, impact assessment
	Subsidies		In current definition part of SBS, for calculation of GVA, OCF,	A	EU Report on Processing sector, impact assessment

	Other income		Part of SBS, used for calculation of Net profit, Gross value added, Return on Investment, EBIT, Operating cash flow, Running Cost to Turnover Ratio, Turnover per FTE, Net Profit per FTE	A	EU Report on Processing sector, impact assessment
Personnel Cost	Wages and salaries of staff		Part of SBS, used for calculation of Net profit, Gross value added, OCF, Return on Investment, EBIT, Operating cash flow, Running Cost to Turnover Ratio, Net Profit per FTE Percentage of paid work	A	EU Report on Processing sector, impact assessment
	Imputed value of unpaid labour		To calculate percentage of paid work Could be collected according to SBS, i.e. by number of workers unpaid	B (as long as it is not important for the sector, numbers of persons unpaid from SBS could be an indicator if calculation is necessary)	
Energy costs	Energy costs		To calculate net profit, Gross value added, Return on Investment, EBIT, Operating cash flow, Running Cost to Turnover Ratio	A, could be combined with other operational cost	EU Report on Processing sector, impact assessment
Raw material cost	Purchase of fish and other raw material for production		To calculate net profit, Gross value added, Return on Investment, EBIT, Operating cash flow, Running Cost to Turnover Ratio	A,	EU Report on Processing sector, impact assessment
<i>Volume of raw material</i>	<i>per species</i>		Not part of SBS, difficult to investigate, but absolutely necessary to assess the dependency of the sector on changes of e.g. management measures in the fisheries sector, trade barriers etc.	A	EU Report on Processing sector, impact assessment

Other operational costs	Other operational costs		To calculate net profit, Gross value added, Return on Investment, EBIT, Operating cash flow, Running Cost to Turnover Ratio	A, could be combined with energy costs	EU Report on Processing sector, impact assessment
Capital costs	Depreciation of capital		To calculate net profit	A	EU Report on Processing sector, impact assessment
	Financial costs, net		To calculate net profit	A	EU Report on Processing sector, impact assessment
Extraordinary costs, net	Extraordinary costs, net		Necessary to calculate net profit,	A	EU Report on Processing sector, impact assessment
Capital value	Total value of assets		To calculate Financial Position and Return on Investment, calculation of opportunity costs	A	EU Report on Processing sector, impact assessment
Net Investments	Net Investments		Shows future expectations of economic agents in the sector	A	EU Report on Processing sector, impact assessment
Debt	Debt		To calculate Financial Position and/or Equity ratios	A	EU Report on Processing sector, impact assessment
Employment	Number of persons employed by		Necessary to show the amount of employment that depends on this	A	EU Report on Processing

	gender		sector, by gender to show if this sector is more gender sensible than other, e.g. mostly female employment		sector, impact assessment
	FTE National		Necessary to calculate productivity measures, like Turnover per FTE, Net Profit per FTE, GVA per FT, Salary per employee	A	EU Report on Processing sector, impact assessment
Number of enterprises	Number of enterprises (By size category)		Necessary to show the structure and also concentration in the sector, to calculate Employment per firm	A	EU Report on Processing sector, impact assessment



Summary: Energy costs and other operational costs could be collected as one cost item. Volume of raw material by species should be integrated into the data collection in order to link it with aquaculture, fisheries and trade. As the experience was that it is not easy to get the data, a mandatory collection could be introduced for a limited period of DCMAP and a new decision could be made after mid-term evaluation. Total value of assets should include also monetary assets and then it would be, according to SBS, sum of balance sheet. This is needed to calculate equity. It should be considered if financial position could be asked for directly, equity ratio or debt ratio or similar, as in former DCR.

### ANNEX III BACKGROUND DOCUMENT ON SOCIAL INDICATORS

Social variables are key for making accurate long-term management plans and conducting, for example, impact assessments of management plans and policy changes. It is suggested that social conditions are often relatively stable and consequently social data could be collected in the 2<sup>nd</sup> and 5<sup>th</sup> years of the data collection process, rather than on an annual basis. STECF (Ebeling et. al. 2012) proposes including data relating to the age and gender of workers in the fisheries sector in the DCF.

In addition to age and gender, a number of other individual-level social indicators relating to fishers/employees and businesses in the fishery, aquaculture and processing sectors are *necessary* for the policy-making process (Frangoudes 2012). These include nationality/ethnicity and employment status.

**Table 1: Necessary Social Indicators**

Variable Group	Variable	Description	Rationale/Cost/Benefits	End-User
DEMOGRAPHIC	Gender	Demographic variable indicating division of labor	Indicator of opportunities in sector along gender lines; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
	Age	Demographic variable indicator age of workforce	Demographic data indicating attractiveness of sector to new/young; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
	Nationality / Citizenship / (Ethnicity?)	Demographic variable indicating place of origin	Indicates place of origin which shows migration patterns; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
Individual level	Employment status	Permanent/ Temporary	Indicator of dependence of individuals on the sector; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
		full/part-time	Indicator of dependence of individuals on the sector; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
		Year-round / seasonal	Indicator of dependence of individuals on the sector; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
		Outside employment	Indicator of dependence of individuals on the sector; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)

There are also individual-level social indicators relating to individuals and business in the fishery, aquaculture and processing sectors in which the *benefits outweigh cost*, and are often only available at the national level and are not gathered for the fisheries, processing and aquaculture segments: education levels and role of employees/vessel.

Table 2- Important Social Variables in which *benefits outweigh cost*

Variable Group	Variable	Description	Rationale/Cost/Benefits	End-User
Enterprise/Business/Boat level	Type	Variable indicating type of business (e.g. corporate vs. family owned)	May be available elsewhere; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
	Number of paid crew/employees	Variable indicating size of vessel/ business	May be available elsewhere; necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)

Table 3 – Individual Social Variables which would be *useful to have* and are not available elsewhere

	Number of unpaid laborers	Variable indicating dependence of families on the vessel/enterprise	Necessary for impact assessments and LTMPs	EU, Regional, MS, local (e.g. FLAG applications)
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## Community and Governance Indicators

There are also a number of social indicators at the community level and about governance, which are not available elsewhere, and which would be good to have. Frangoudes (2012 :26-7) describes these indicators as ‘qualitative’. Some of them are described quantitatively, but for many, data would be based on qualitative judgements from respondents. Frangoudes goes into comprehensive detail.

For the community level indicators, Frangoudes (2012 :26-7) describes these indicators as ‘qualitative’. Some of them are described quantitatively, but for many, data would be based on qualitative judgements from respondents.

**Table 4. Indicators of Community dependence on fisheries activities**

1	Activité est, ou a déjà été, à la base de la communauté, ou bien l'activité est-elle (a-t-elle toujours été) une activité parmi d'autres	Is fisheries at the heart of the community, or is it one activity among others ?
2	Opportunité 'positive', ou assurance contre mauvais état de l'économie (personnelle ou globale)	Positive opportunities or insurance against negative economic situations (personal or global)
3	Contribue à l'image, identité, fierté, tourisme, etc...	Contribution of fisheries to image, identity, tourism in the community
4	Taux de pêcheurs ayant le sentiment d'appartenir à un groupe partageant des valeurs communes	Level of fishers' sense of belonging to a group with shared values
5	Nombre des pêcheurs et des habitants qui considèrent la pêche comme le symbole de leur communauté	Number of fishers and inhabitants who consider fisheries to be a symbol of their community
6	Nombre de collaborations entre les différentes activités menées pour garder le caractère maritime de communauté	Number of projects between different activities (what does word this mean in this context ?) to protect the maritime character of the community
7	Nombre des situations conflictuelles enregistrées entre activités (à partir de la presse locales ou des comptes-rendus de réunions)	Number of conflicts between different activities (I'm not sure what 'activities' means here : economic activities ??)
8	Nombre des pêcheurs ou de gens liés à la pêche participant à la vie publique de la communauté (mandats électifs, conseil d'administration de banques, mutuelles, etc.)	Number of fishers who participate in the public life of the community (elected officials, councils, banks, mutuals etc)
9	Analyse des relations entre implication dans la pêche et liens de parenté	Analysis of relations between involvement in the fishery and family relationships
10	Identification et analyse des réseaux sociaux	Identification and analysis of social networks
11	Lieux d'habitation des pêcheurs (mesure de l'impact de la pression foncière sur le littoral sur les quartiers de pêcheurs).	Place of habitation of fishers – something to do with measuring the pressure on coastal land

Reference: Frangoudes (2012)

Of the indicators in Table 4, numbers 1 and 3 through 8 could be subsumed into a universal section about how much the community needs fishing. Thus, ‘dependence’ or ‘reliance’ is determined by whether fisheries contribute *significantly* to the ‘brand’ of the community in terms of

- what proportion of the local economy is contributed by fisheries ;

- how many other economic activities (eg. tourism, retail, hospitality) use fisheries as a symbol either as individual businesses or in collaborative local projects?;
- what percentage of public officials are from the fisheries sector?

Number 2 relates to ‘resilience’ : what community strategies are in place (e.g., insurance, other employment opportunities) to cope with an ‘economic downturn’ ?

Numbers 9 and 10 relate to social/familial network analysis. This is outside the probable scope of the DCF, though important information for impact assessments; special studies would be a better method for obtaining these data.

## **Governance**

The discussion about governance (Frangoudes 2012) concludes that small-scale fishermen are not well represented in the governance process, which operates at multiple geographical scales, by national fishermen’s organisations or by governments. This is seen despite the culture of consultation found in European politics. Data on governance is key for impact assessments and thus is good to have, though may not be necessary through the DCF. Targeted studies may be the way to go to get these data.

Table 5. Indicators for Fisheries Governance

<i><b>Au niveau local et national</b></i>	<i><b>Local and National</b></i>
Nombre d’organisations ou autres formes d’organisations représentant le secteur de la pêche au niveau local, régional et national	Number of fishers’ organisations at different scales
Taux de participation au processus de décision (déclaré par les pêcheurs ou observé dans les réunions des organisations et instances de consultation)	Level of fishers’ participation in organisations’ meetings and consultations
Nombre de pêcheurs participants dans les instances décisionnelles de la pêche (différents niveaux)	Number of fishers involved in fisheries decision-making
Nombre de conflits entre pêcheurs résolus localement où	Number of conflicts between fishers resolved locally
Cartographie des accords informels pour gérer les ressources dans les communautés	Are there informal agreements in place to manage fisheries in a given locality
Nombre de pêcheurs qui collaborent avec les scientifiques pour le suivi de la ressource	Number of fishers who collaborate with scientists to monitor fisheries resources
Nombre d’actions de solidarité menées par les organisations représentant les pêcheurs pour soutenir les familles des marins pêcheurs	Number of actions taken by organisation representatives to support fishing families
Capacité à identifier les changements de comportements de pêche qui pourront se produire en cas de mise en place des mesures de gestion (risque de mettre en cause l’équité entre métiers et la cohésion sociale)	Ability to predict probable changes in fishing behaviour in response to management measures
Evolution des droits de propriété et des réseaux sociaux établis par la location ou la vente des QIT là où ils existent	Evolution of property rights and social networks by the lease or sale of ITQs (where relevant)
<i><b>Au niveau européen</b></i>	<i><b>European</b></i>

Tx de participation des pêcheurs au CCR (par type de flottille)	Level of participation by fishers in RACs
Nombre de contestations venant des pêcheurs auprès de l'UE	Number of complaints from fishers to the EU
Nombre de réunions de concertation entre l'UE et les pêcheurs liées aux mesures de gestion	Number of meetings between the EU and fishers about management measures
CCR : nombre d'avis émis par chaque CCR / nombre de réponses de la commission	Number of opinions issued by each RAC vs. Number of responses from the Commission
CCPA : nombre d'avis émis	

As with Community indicators, the issue of governance could be organised in different ways:

- a) *modes* of participation: e.g., conflict management, informal agreements, scientific research, the policy-process
- b) *indicators* of participation : numbers of fishers engaged in their local and national organisations; numbers of fishermen's organisations, and numbers of instances, engaged in national and European policy processes; numbers of RACs-Commission communications

Issues of governance are important for impact assessments and to have complete long- term management plans. With this in mind, a simple measure of participation could be a possible mode for getting at governance. Variables could include, at the individual level:

- Are you a member of a fishermen's organisation?
- Do you actively participate?

There could also be equivalent questions at the national/European scales. This would enable researchers, policy-makers and industry to analyse the balance between participation and policy response for example.

## References

Frangoudes, Katia, (2012) 'Rapport sur l'identification des indicateurs sociaux pour le secteur de la pêche dans l'Union Européenne' Réalisé pour la DG MARE, commitment n° SI2.615631

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## **ANNEX IV POSITION OF RCMS (BALTIC, NORTH ATLANTIC AND NORTH SEA), ON THE NEW EU DCMAP, “OOSTENDE DECLARATION 2012”**

### **1. Vision**

End users will receive relevant, high quality data collected through an efficient regional basis.

### **2. Mission**

Data collectors will use statistically sound sampling schemes and operate under the guidance of Regional Coordination Groups, in which end-user priorities are agreed and the coordination of data

### **3. Collection takes place to meet those priorities. Commercial Fisheries Sampling**

#### **□ Introduction**

The revised DCF (EC no. 199/2008) envisaged a data collection scheme that provided detailed, highly resolved data for many métiers and fish species. That vision failed to materialize due to the absence of achievable and clear objectives and the high financial and logistical costs involved in highly disaggregated quota-based sampling schemes.

Steps were taken during the mid-term of that programme to reinterpret as well the demands of the framework as those actions led to the development of a number of expert working groups which more clearly defined the statistical requirements under-pinning the sampling of commercial fisheries data (e.g., WKACCU, WKPRECISE, WKMERGE, WKPICS). The latter developments also enabled a clearer picture to the development of the means by which regional coordination could be enhanced.

This position to a data collection programme builds on the experience of the current framework, to present a statistically-robust programme appropriate to more effectively coordinated regional data collection and with the priorities in line with the end-users needs.

One of the primary goals of the data collection is to produce robust and transparent estimates of the catch of vessels operating in regional fisheries. These catch estimates are used by expert groups to estimate fisheries induced mortality for fishery-based management.

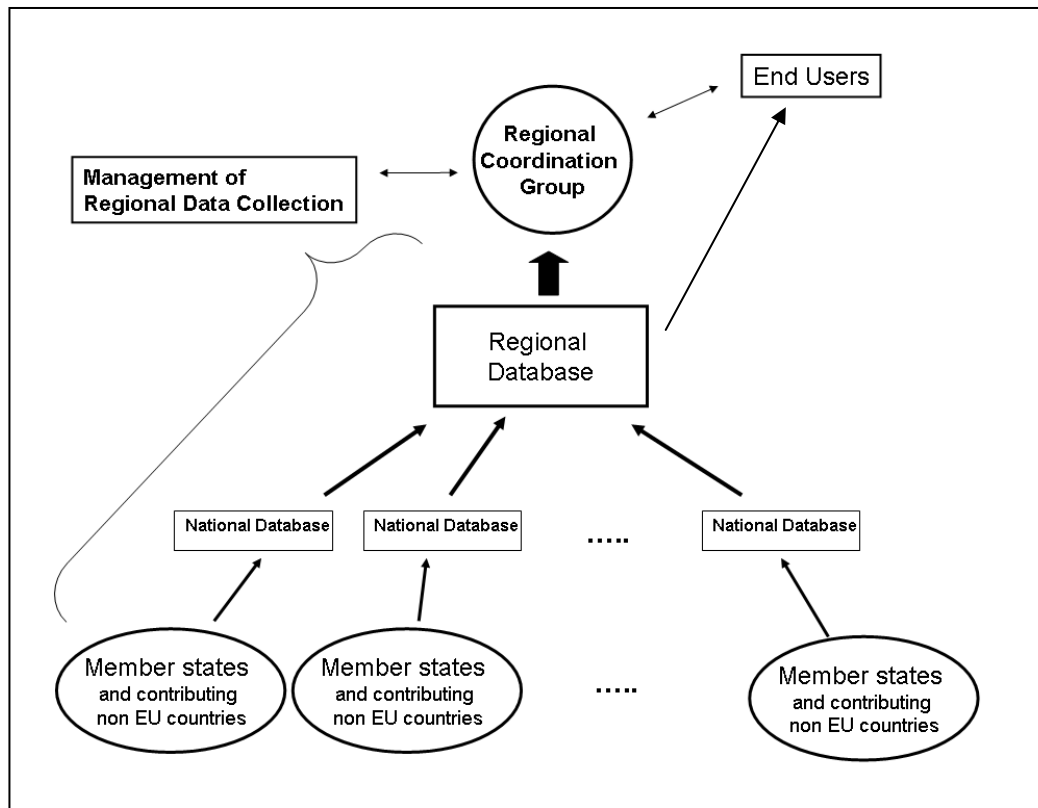
In designing sampling schemes it is most important to define the required output of the sampling and what it is used for. It is envisaged that information will continue to be needed to provide advice by both stock and fishery. ICES is now providing advice for about 200 stocks and will continue to do so in the future. Many of these stocks have presently limited data. It will not be possible, also in the future, to provide detailed information which allows analytical assessment for all stocks. Thus, priorities have to be set and data requirements need to be specified in consultation with the end users.

This position on the new DC-MAP will require a shift in perception of what is achievable and in the approach to be taken in sampling methodologies. Métiers were defined to characterize fishing operations after they had taken place and cannot be used as sampling strata because setting target sample sizes for métiers violates the principles of probability-based sampling. However, the métier concept has a value for classifying fishing trips into groups with similar fishing pattern. Landings and effort data will be available by métier. Biological samples can be assigned to métiers, providing information from the main métiers where sufficient and relevant data exists. However it must be

realized that biological information will not be available for all métiers, which is also the case in the present situation.

#### □ Framework

Key features of the proposed framework are illustrated in Figure xx.



#### ■ Member States and non-EU countries

Member States will be obliged to design sampling schemes in accordance with best practice guidelines to fit within the overall regional sampling programme.

- They will need to adjust sampling programme in accord with priorities agreed by the regional coordination group.
- They will regularly update and populate the regional database.
- They will ensure appropriate data capture to fully populate mandatory fields in common data exchange formats.
- They will provide capacity for national data collection priorities, and ensure DC-MAP co-financed regional data collection.
- Non-EU countries are encouraged to take actively part to regional co-operation and where possibly harmonize both sampling practices and data products.

#### National Databases

These comprise the primary storage platforms to hold an individual nation's master data set used to populate the regional database and ensuring appropriate quality standards.



## ■ **Regional Database**

This is a prerequisite for the planning and coordination of regional sampling programmes and is populated from national master data sets.

It is the regional repository for sampled data and comprises as well the data used to examine a Member State's performance against its annual work plan..

In order to meet the foreseeable future requirements of the regional coordination group, present development needs are currently the subject of a study proposal (small scale studies in support of the CFP).

Subsequent to such further development, the RDB will provide the possibility to incorporate estimation processes for data aggregation, as required by end-user, and will provide a repository for processed data (as processed either internally within the regional database or through external systems).

## ■ **Regional Coordination Group**

Regional coordination is a continuous process, not just an annual meeting. This process should lead into the elaboration of guidelines and decisions to ensure that adequate data are collected through coordinated national work plans. This is to enable regional assessments for stocks, fisheries and marine ecosystems in accord with transparent objectives and agreed priorities and to oversee sampling methodology and data flow

The regional coordination group requires participation by a membership that has the authority to consent to the decisions made by the group.

The group needs to have a broad expertise including statisticians, data processors, national data collection coordinators and may be other expertise.

## **End-user negotiation**

A cost-effective and efficient regional coordination process requires that end-users are able to prioritize their data requirements between objectives and within available resources.

The regional coordination group provides the forum for communication between National Correspondents, the European Commission and other end-users regarding the establishment of regional priorities.

## ■ **Timeline**

Expert working groups are still developing best practice guidelines, which will form the basis for development of the statistically sound sampling programs. However, it is unlikely that all countries will be able to implement statistically sound sampling schemes by 2014. Therefore, it is necessary to establish a challenging timeline for the programme to be fully implemented and the recommendation is that Member States and databases should be fully compliant with the programme in time for the mid-term review of the 2014-2020 EMFF.

This will require that all member states should take part in the workshops and study groups developing statistically sound approaches to sampling (e.g., WKPICS2, WKPICS3 and SGPIDS).

Also, there is a need to develop regionally standardized observer practices, training programmes, manuals and other guidelines.

In addition, national and regional database infrastructure needs to be further developed according to the identified needs and requirements.

#### **4. National Operational Programmes (OP), National Annual Work Plans and Reporting**

These are much broader than the topic of commercial fisheries sampling; nevertheless, specific features relevant to commercial fisheries sampling can be outlined.

##### **□ Commercial fisheries sampling**

The current framework's origins that assume quota sampling have resulted in a highly detailed, target-orientated set of tables to be constructed and populated for both the annual programmes and, as out-turn values, in the annual reports. This is inappropriate for probability-based statistically sound sampling schemes.

##### **■ National Annual Work Plan**

- The detailed tables in the current national programmes are replaced by a detailed description of the national catch sampling scheme for landings and discards, which comprise the national component of an agreed regional sampling scheme. This will include a description of how probabilistic selection takes place in the various components and stages of the scheme. This could be included in the seven year operational programme and simply referred to in the annual work plan.
- A detailed section demonstrates that the national component really does comprise a set of robust statistical methods in accordance with established best practice guidelines (or is working towards it in the period leading up to the EMFF mid-term review).
- A section will define the scale of the sampling programme in terms of the number of port/market/factory sampling trips to be undertaken and, for example, a statement of the expected number of fishing voyages (or appropriate sampling units as defined in the description of the national catch sampling scheme) to be sampled per trip, the number of voyages (and days at sea) to be sampled by observers aboard fishing vessels and the frequency of self-sampling (where implemented).
- An annual schedule to upload data to the regional database, including fixed dead-lines for final uploads, and to ensure the timely provision of processed data as required for the stock and fishery-based assessments carried out by expert working groups.

##### **○ Annual report**

This will comprise a set of performance metrics relative to expectations provided in the annual work plan and quantitative summaries of the achieved samples, the provision of quality indicators and a clear description of the data provided to the regional database.

Standard reports derived from the regional database should be used as a basis for the annual reports.

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## **LIST OF BACKGROUND DOCUMENTS**

Background documents are published on the meeting's web site on:

<http://stecf.jrc.ec.europa.eu/web/stecf/ewg15>

List of background documents:

1. EWG-12-15 – Doc 1 - Declarations of invited and JRC experts.

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European Commission

EUR 25825 EN – Joint Research Centre – Institute for the Protection and Security of the Citizen

Title: Scientific, Technical and Economic Committee for Fisheries. Review of proposed DCF 2012-2020 - part 2 (STECF-13-01).

STECF members: Casey, J., Abella, J. A., Andersen, J., Bailey, N., Bertignac, M., Cardinale, M., Curtis, H., Daskalov, G., Delaney, A., Döring, R., Garcia Rodriguez, M., Gascuel, D., Graham, N., Gustavsson, T., Jennings, S., Kenny, A., Kirkegaard, E., Kraak, S., Kuikka, S., Malvarosa, L., Martin, P., Motova, A., Murua, H., Nord, J., Nowakowski, P., Prellezo, R., Sala, A., Scarcella, G., Simmonds, J., Somarakis, S., Stransky, C., Theret, F., Ulrich, C., Vanhee, W. & Van Oostenbrugge, H.

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#### Abstract

The Expert Working Group meeting of the Scientific, Technical and Economic Committee for Fisheries EWG 12-15 was held from 01 – 05 October in Brussels - Belgium, to evaluate options proposed by DG MARE on the new EU Multi-annual programme for data collection (MAP) 2014-2020. The report was reviewed by the STECF by written procedure in January 2013.

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The Scientific, Technical and Economic Committee for Fisheries (STECF) has been established by the European Commission. The STECF is being consulted at regular intervals on matters pertaining to the conservation and management of living aquatic resources, including biological, economic, environmental, social and technical considerations.